

LANE COUNTY FOREST SOIL RATINGS

Map Symbol	Soil Name	[1]		[2]	
		Site Index		Cubic Foot /Acre/Year	
135E	Willakenzie cl, 20-30%	110		154	
135F	Willakenzie cl, 30-50%	110		154	
136	Willanch fsl	none		40**	
137F	Winberry v gr l, 10-45%	80		98	
138E	Witzel v cob l, 3-30%	none		70**	
138G	Witzel v cob l, 30-75%	none		70**	
139	Woodburn sil	133		199	
140	Yaquina lfs	none*		none	
141	Yaquina-Urban land complex	***		45**	
142G	Yellowstone-Rock outcrop, 10-60%	***		38**	

EXHIBIT 3-2

All ratings are taken from the "Single Phase Interpretation Sheets" (green sheets) published by the Soil Conservation Service (SCS) for the Lane County Area, Oregon except those marked \*\*

All ratings are for Douglar Fir unmanaged, fully stocked stands.

\* ratings for additional tree species are listed on SCS green sheets

\*\* These estimated soils ratings are taken from an Office of State Forester Memorandum, February 8, 1990, General File 7-1-1

\*\*\* multiple site indices; refer to the cu.ft./acre/yr column for a composite rating for this complex

[1] 50 year base

[2] volume produced at age of culmination

4F  
March 1997

Supplement to Marginal Lands Information Sheet

**BOARD OF COUNTY COMMISSIONERS DIRECTION REGARDING THE  
INTERPRETATION AND ADMINISTRATION OF MARGINAL LANDS  
APPLICATIONS**

On February 26, 1997, the Lane County Board of Commissioners reviewed the state Marginal Lands law and developed responses to seven issues in the law needing clarification for purposes of administration by Lane County. Those issues are identified below, followed by the direction provided by the Board. Any application for the Marginal Land designation within the Lane County Rural Comprehensive Plan's jurisdiction must be in compliance with the Board's directions. Refer to the Marginal Lands Information Sheet; or to Oregon Revised Statutes 197.247 (1991 laws), for an explanation of the law itself.

**ISSUE 1: What is the Marginal Lands concept?**

**Board's Direction:**

The Board recognized that marginal land is intended to be a sub-set of resource land, i.e., there are "prime" resource lands and "marginal" resource lands. The marginal lands are to be available for occupancy and use as smaller tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 - Agricultural Lands and Goal 4 - Forest Lands.

**ISSUE 2: Definition of "Management".**

When considering forest land, the entire growth cycle must be considered for evidence of management. This is because even the best managed forest operations may have nothing occurring on the land during the five-year window (1978 - 1982) stated in the marginal lands statute (ORS 197.247(1)(a)(1991 Edition). For farm operations, however, it is hard to conceive of an operating farm on which nothing occurred for five years.

**Board's Direction :**

No evidence of human activity on the land is required for forest land to be "managed". The conscious decision not to convert the land to another use is enough evidence of management to meet the statutory intent, provided there is a significant amount of merchantable or potentially merchantable trees on the property. Likewise, evidence of timber harvest since 1978 would suffice to show management even if there were no trees currently on the property. For farm land, no evidence of farm use during the 5-year statutory window would indicate that land was not managed for farm use.

**ISSUE 3. Managed "as part of" a (farm or forest) operation during (1978-1982).**

Does this phrase in ORS 197.247(1)(a)(1991) mean, for example, that if a large timber company owned and managed a 2000 acre tract during the five-year window, and then sold someone a 40 acre portion of non-forest land in 1985, that 40 acres would not be eligible for Marginal Lands designation?

**Board's Direction :**

The Board found that the law creates a general presumption that all contiguous land owned during 1978-82 was part of the owner's "operation". That presumption could be rebutted, however, by substantial evidence

that the parcel in question was not, in fact, a "contributing part" of the operation. The applicant would bear the burden of producing such evidence.

ISSUE 4: What price data should be used to calculate gross annual income for forest lands?

**Board's Direction :**

The legislative intent of the "management and income test" of the Marginal Lands Law was to identify those lands which were not, at the time the Marginal Lands law was enacted (1983), making a "significant contribution" to commercial forestry. Therefore, it is appropriate and statistically valid to use the following methodology:

1. Based on the best information available regarding soils, topography, etc., determine the optimal level of timber production for the tract assuming reasonable management.
2. Assume that the stand was, in 1983, fully mature and ready for harvest.
3. Using the volumes calculated in step (1), and 1983 prices, calculate the average gross annual income over the growth cycle.

ISSUE 5: What "growth cycle" should be used to calculate gross annual income?

**Board's Direction :**

The consensus of the Board was that a 50-year growth cycle should be adopted as the usual standard, with the option that another standard could be used if substantiated by compelling scientific evidence presented by the applicant. The Board's choice was based on evidence that the USDA Natural Resource Conservation Service has adopted the 50-year cycle for rating soil productivity, plus the administrative ease of having a standardized figure.

ISSUE 6: Weight of evidence.

One of the main holdings of the Ericsson case, which arose in Lane County, is that on-site evaluation by a qualified expert is weightier evidence than published data. Given this ruling, what is the appropriate role of the parcelization table in Lane Code 16.211(10)(b) and the legislative findings for Goal 4 of the Rural Comprehensive Plan as an income standard?

**Board's Direction :**

As a matter of administrative ease, and in the absence of other substantial evidence, the parcelization test could still be used. It is one method of identifying the acreage required of a given forest capability classification to achieve the \$10,000 income standard.

ISSUE 7: Ambiguities in the parcelization tests of ORS 197.247(1)(b)(A) & (B).

Is the parcelization test measuring the percent of an area (acreage) or the percent of the number of parcels a "parcel count"? If the test in ORS 197.247(1)(b)(A) is an area test, does the percentage requirement apply to the acreage or to the number of parcels that lie wholly or partly within the 1/4 mile of the subject tract?

**Board's Direction :**

Regard the tests in ORS 197.247(1)(b)(A) & (B) as "area" tests with the difference being that (A) specifies an area including the subject parcel and land within 1/4 mile and uses a 50% small lot test, whereas (B) increases the area to a minimum of 240 acres but raises the small lot test to 60%.

(Note: This is the position adopted by Lane County in the Jackson case. In that case, Lane County ruled that the area was limited to the 1/4-mile line, whereas DLCD argued that the area line should expand to include the entirety of any parcel partly located within the 1/4 mile boundary. DLCD threatened to appeal the Jackson case on that basis, but did not do so.)



**Marc E. Setchko**  
CONSULTING FORESTER

870 Fox Glenn Avenue  
Eugene, Oregon 97405  
Phone: (541) 344-0473  
FAX: (541) 344-7791

May 28, 2004

Amendment to Productivity Analyses done on Carver, Wood, Christie and Frisbee Parcels:

All of the above mentioned analyses were done using 1983 log prices. These prices were used because the productivity analysis (from an income standpoint) of a parcel is calculated using this time period; Marginal Lands: ORS 197.247 (1)(a) "The proposed marginal land was not managed during three of the five calendar years preceding January 1, 1983, as part of a ... forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income." The question of using current log prices has been raised when considering the dollar figures generated from these calculations. For the sake of discussion this has been looked at.

Taking the prices for 2 saw, 3 saw and 4 saw logs and using a weighted average a camp run price can be determined. Camp run is the average price received, per thousand board feet, for all the logs taken together; i.e., looking at the money received for each grade log, adding them all up, and dividing by the total volume. Using 1983 log prices and the percentage of 2S, 3S and 4S shown in the analyses, shows a camp run price of approximately \$230/MBF. Currently, before the normal price drop which occurs in the summer months due to the increase in logs being shipped to mills, a camp run price of \$575/MBF would be a realistic number to use. In the summer months when everyone can log on dirt there are many more logs available for the mills to buy, which is why the price generally goes down in the summer. Using a ratio between \$230/MBF and \$575/MBF, a total income can be calculated for each parcel, without the need to show the volume and grade breakdown.

Price Ratio -  $\$575/\text{MBF} \div \$230/\text{MBF} = 2.5$

See Productivity Analyses for Gross Incomes shown below.

Carver Parcel - Gross Income -  $\$94,285 \times 2.5 = \$235,713 \div 50 \text{ yrs.} = \$4,714/\text{YEAR}$

Christie Parcel - Gross Income -  $\$128,467 \times 2.5 = \$321,168 \div 50 \text{ yrs.} = \$6,423/\text{YEAR}$

Frisbee Parcel - Gross Income -  $\$146,097 \times 2.5 = \$365,242 \div 50 \text{ yrs.} = \$7,305/\text{YEAR}$

Wood Parcel - Gross Income -  $\$130,480 \times 2.5 = \$326,200 \div 50 \text{ yrs.} = \$6,524/\text{YEAR}$

Carver and Christie are calculated using the configuration of the parcels as they exist today; Frisbee and Wood are calculated using the configuration of the parcels as they existed in 1978 thru 1983.

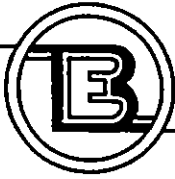
From the above calculations it can be seen that, even using current winter prices (which are higher than summer prices), the estimated yearly income is less than \$10,000/year.

In summary, even if today's log prices are used, I find from the specific site conditions present and experience with similar lands, that this property is ill suited to the production of merchantable timber and use as land for forestry purposes. It is my opinion that this parcel should be classified as marginal land.

Sincerely,

*Marc E Setchko*





# Branch Engineering, Inc.

310 5th Street  
Springfield, Oregon 97477  
(541) 746-0637  
Fax (541) 746-0389

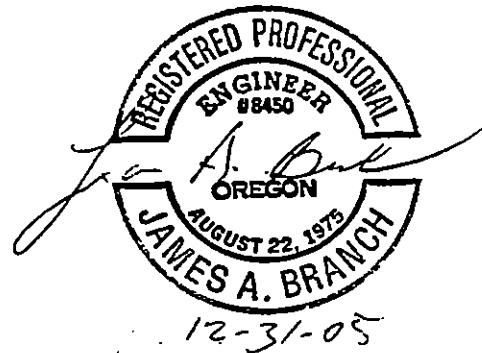
## Technical Memorandum

**Date:** May 27, 2004

**To:** Mr. Roy Carver, III

**From:** James A. Branch, P.E., Damien Gilbert, E.I.

**Re:** Rural Comprehensive Plan Minor Amendment  
Map 18-04-13, Lot 3500, Lane County, Oregon  
Evaluation of Applicable Transportation Planning Rules



Dear Roy,

As requested, Branch Engineering, Inc. has evaluated potential traffic impacts associated with your proposed Rural Comprehensive Plan Minor Amendment allowing the development of four residential dwellings. The scope of the evaluation was limited to criteria in the Transportation Planning Rule (TPR) as set forth in Oregon Administrative Rules (OAR) Chapter 660, Division 12, and the 1999 Oregon Highway Plan (OHP).

### Project Description

The subject property is a vacant parcel located at the end of Ridgewood Drive, in Lane County, as shown in Figure 1.

The proposed plan amendment involves changing the designation of the subject property from Impacted Forest (F-2) to Marginal Lands (ML-RCP). Specifically, the use is intended to be a four-lot residential development.

## **Relevant Criteria**

OAR 660-012-0060(1) states:

Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. This shall be accomplished by either:

- (a) Limiting allowed land uses to be consistent with the planned function, capacity, and performance standards of the transportation facility;
- (b) Amending the TSP to provide transportation facilities adequate to support the proposed land use consistent with the requirements of this division;
- (c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes; or
- (d) Amending the TSP to modify the planned function, capacity and performance standards, as needed, to accept greater motor vehicle congestion to promote mixed use, pedestrian friendly development where multimodal travel choices are provided.

OAR 660-12-060(2) establishes that a proposed plan amendment would “significantly affect” a transportation facility if it:

- (a) Changes the functional classification of an existing or planned transportation facility;
- (b) Changes standards implementing a functional classification system;
- (c) Allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of a transportation facility; or
- (d) Would reduce the level of service of a facility below the minimum acceptable level identified in the TSP.”

## **Applicable Criteria**

To satisfy OAR 660-012-0060(1)(a), the following four criteria were applied to the proposed plan amendment and evaluated for applicability.

- OAR 660-12-060(2)(a) is not applicable, as the proposed amendment would not change

the functional classification of an existing or planned transportation facility.

- ▶ OAR 660-12-060(2)(b) is not applicable, as the proposed amendment does not change standards implementing a functional classification system.
- ▶ OAR 660-12-060(2)(c) is applicable, and is satisfied, as the proposed amendment will continue to allow types or levels of land uses which would result in levels of travel or access which are consistent with the functional classification of the transportation facility.

The subject property will utilize the existing Ridgewood Drive (a Local County Roadway) for access. This roadway currently serves approximately nine developed properties, and has an average daily traffic (ADT) volume of 110, per 2003 Lane County Traffic Volume Tables. Upon completion of the proposed development, Ridgewood Drive would serve an additional four residential properties, for a total of approximately 13 properties. Specifically, the addition of four residential dwellings would increase the ADT to an estimated 150. This volume is within the range normally expected for a local road, and is consistent with the functional classification of the transportation facility. Furthermore, Lane Code defines a local road as, "a road or street used primarily for access to abutting properties". This is consistent with the proposal to provide access to the future development via Ridgewood Drive.

- ▶ OAR 660-12-060(2)(d) is applicable and is satisfied by the following analysis provided herein.

## **Mobility Standards**

Client supplied information was used for future development of the property to determine a "reasonable worst case development scenario". The potential site generated traffic for four residential dwellings would have a net gain in vehicle trips entering and leaving the site. Therefore, to satisfy OAR 660-012-0060(1)(a), "Limiting allowed land uses to be consistent with the planned function, capacity and performance standards of the transportation facility", it has to be demonstrated that no transportation facility would be significantly affected by a reduction of level of service below the minimum acceptable level identified in the Transportation System Plan (TSP), as applicable in OAR 660-12-060(2)(d).

Level of service (LOS) describes the quality of traffic flow at an intersection. It can be based on either vehicle delay or the volume to capacity ratio (v/c). The OHP identifies the maximum acceptable v/c for local roads in rural lands outside an urban growth boundary to be 0.75.

A level of service analysis was performed for the PM peak hour at the intersection of Ridgewood Drive and Blanton Heights. Level of service calculations were performed using the computer program Highway Capacity Software 2000, Version 4.1d by McTrans. The level of service was calculated for each movement which has to yield the right-of-way.

## Analysis

Intersection LOS was calculated and analysis was performed for the “reasonable worst case scenario” development assumptions for a 15 year planning horizon, as required in the OHP.

Traffic counts were performed in May, 2004 at the nearest transportation facility (Ridgewood Drive and Blanton Heights intersection) to determine existing PM peak hour traffic volumes. Results of counts indicate the PM peak hour occurs between 4:45 and 5:45 PM. The existing traffic volumes are shown in Figure 2.

For the purpose of estimating future year 2019 background traffic volumes, existing traffic volumes were factored up at a two percent per year growth rate. Figure 3 illustrates future 2019 PM peak hour traffic volumes.

In estimating vehicle trip generation rates for the proposed use, a reference was made to Trip Generation, 7<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE), 2003, and client supplied “reasonable worst case scenario” land use and density assumptions were applied. The following summary table identifies the projected PM peak hour trips entering and leaving the site for the future development scenario.

TRIP GENERATION (PM Peak Hour)			
Land Use	Vehicles Per Hour		
	Enter	Leave	Total
Single-Family Detached Housing ITE Land Use 210 Average Rate = 1.01 per Dwelling Unit	(64%)	(36%)	(100%)
Proposed Dwelling Units = 4	3	2	5

Figure 4 illustrates assignments of site generated PM peak hour traffic volumes for both development scenarios.

The above site generated traffic was distributed to the adjacent roadway system based on observed traffic patterns, and assigned to specific intersection movements at the studied intersection. This traffic was added to year 2019 background traffic volumes, resulting in 15 year planning horizon ‘build’ traffic volumes, as shown in Figure 5. Based on these volumes, v/c was calculated.

Results of the calculations are included with this memorandum, and are summarized in the following table:

LEVEL OF SERVICE (PM Peak Hour)		
Facility (Intersection)	Movement	v/c
Ridgewood Drive / Blanton Heights	Southbound - Left	0.01
	Westbound Approach	0.01

No transportation facilities were analyzed beyond the above studied intersection due to the very low site generated traffic. The greatest increase of new vehicle trips projected to impact an adjacent intersection (beyond the studied intersection) is four under the proposed use.

### Conclusion

As indicated above, all movements at the studied transportation facility were calculated to have an acceptable v/c ratio (0.75 or better), under the proposed use, through a 15 year planning horizon.

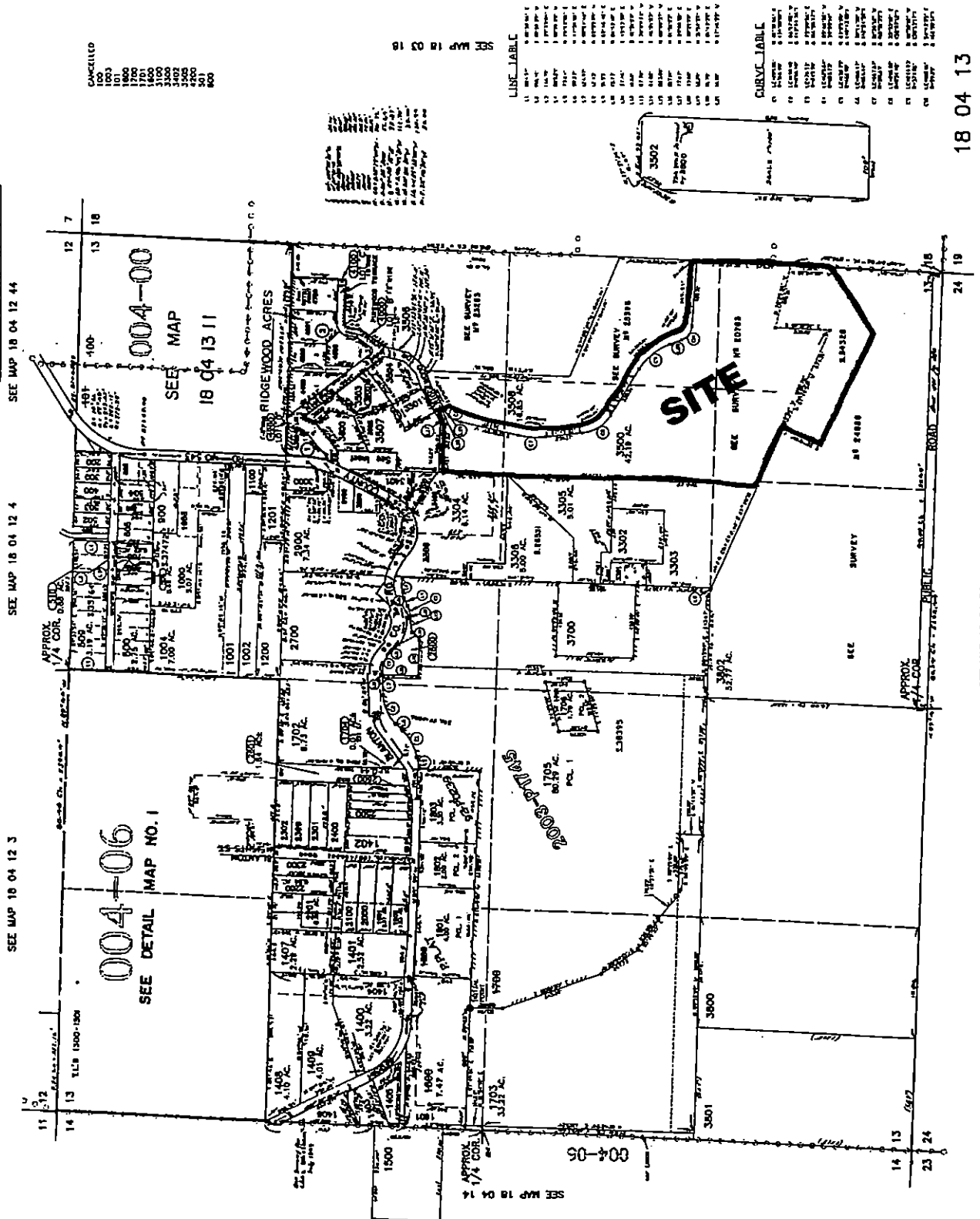
The proposed plan amendment to zoning designation for the subject property will not have "significant impact" to a transportation facility, as defined in OAR 660-12-060(2)(d). Therefore, OAR 660-012-0060(1)(a) has been satisfied by the results of this analysis.

Additionally, it should be noted, sight distance was observed to be somewhat restricted on portions of Ridgewood Drive. However, it appeared that all restrictions could be mitigated within the public right of way by the limbing of trees, vegetation removal, or fence relocation.

FOR ASSESSMENT  
AND TAXATION  
ONLY

18 04 13

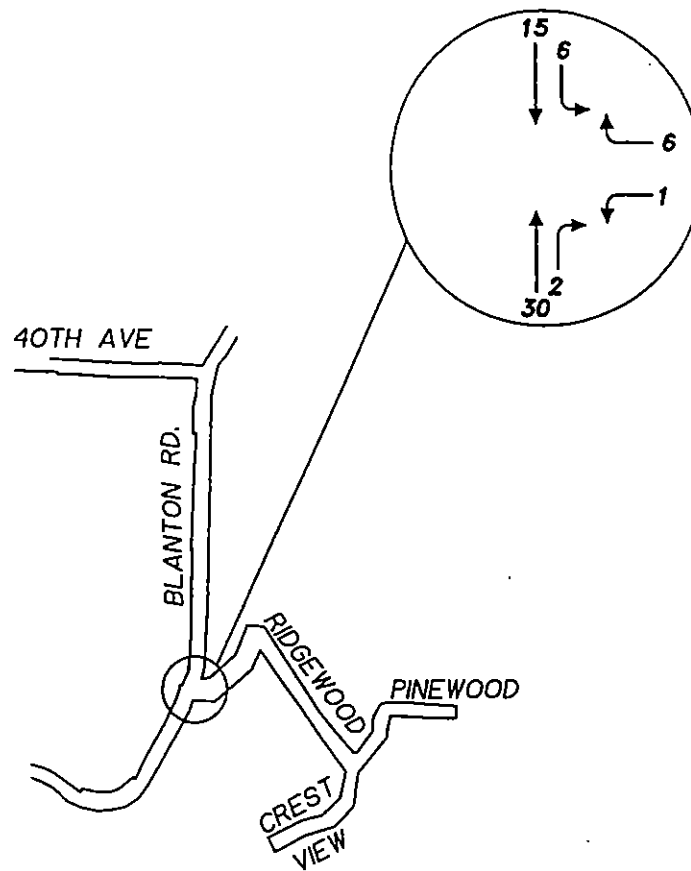
SCALE 1" = 400'



## FIGURE 1

SEE MAP 18 04 24

2004 EXISTING TRAFFIC VOLUMES  
(PM PEAK HOUR)



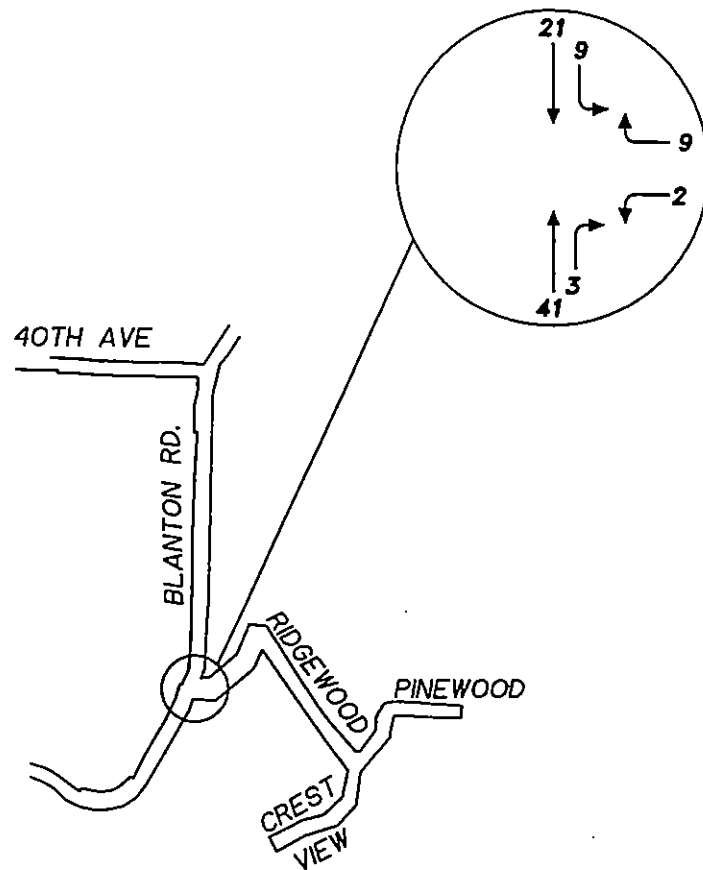
N.T.S.

FIGURE 2



Branch Engineering, Inc.

2019 'NO BUILD' TRAFFIC VOLUMES  
(PM PEAK HOUR)



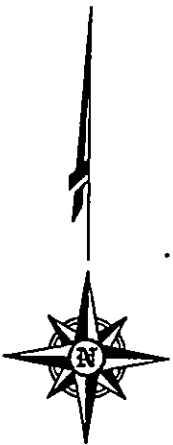
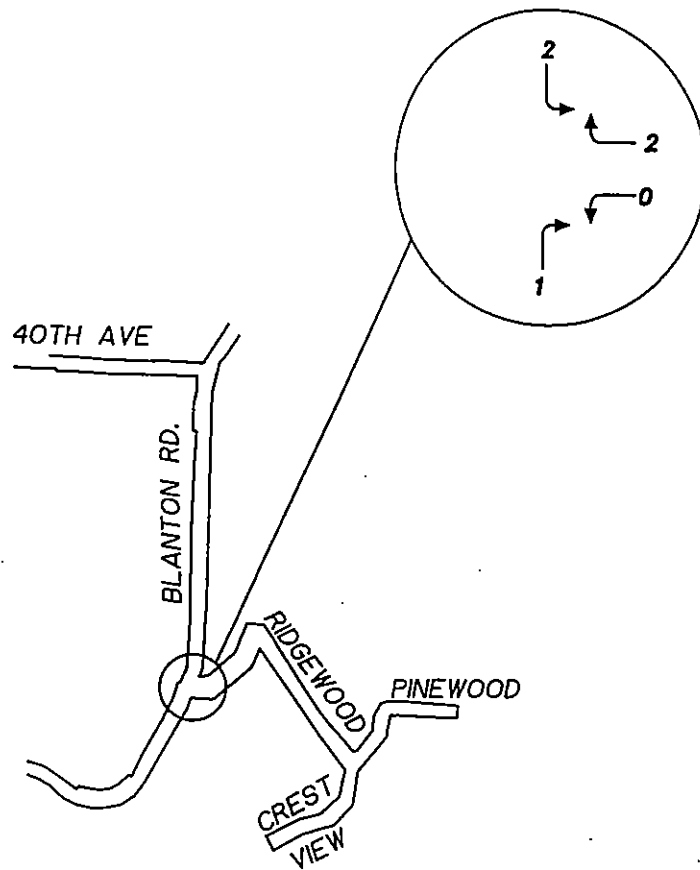
N.T.S.

FIGURE 3



Branch Engineering, Inc.

**SITE GENERATED TRAFFIC**  
(PM PEAK HOUR)



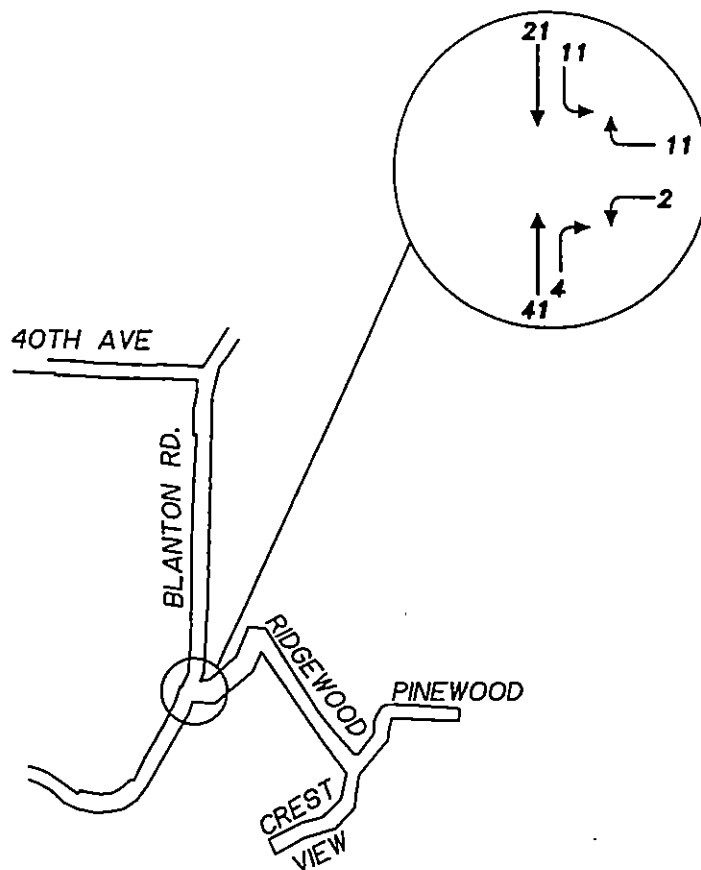
N.T.S.

**FIGURE 4**



**Branch Engineering, Inc.**

2019 'BUILD' TRAFFIC VOLUMES  
(PM PEAK HOUR)



N.T.S.

FIGURE 5



Branch Engineering, Inc.

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>				<b>Site Information</b>				
Analyst	D. Gilbert			Intersection	Ridgewood / Blanton Heights			
Agency/Co.	Branch Engineering, Inc.			Jurisdiction	Lane County			
Date Performed	5/28/2004			Analysis Year	2019 Build			
Analysis Time Period	PM Peak Hour							
Project Description Carver Development - Minor Comp. Plan Amendment								
East/West Street: Ridgewood Drive				North/South Street: Blanton Heights				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>	<b>Northbound</b>			<b>Southbound</b>				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	41	4	11	21	0		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	0	45	4	12	23	0		
Percent Heavy Vehicles	0	—	—	5	—	—		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
<b>Minor Street</b>	<b>Westbound</b>			<b>Eastbound</b>				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	2	0	11	0	0	0		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	2	0	12	0	0	0		
Percent Heavy Vehicles	5	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
<b>Delay, Queue Length, and Level of Service</b>								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		12		14				
C (m) (vph)		1539		1006				
v/c		0.01		0.01				
95% queue length		0.02		0.04				
Control Delay		7.4		8.6				
LOS		A		A				
Approach Delay	—	—	8.6					
Approach LOS	—	—	A					

Rights Reserved

**POAGE** **ENGINEERING & SURVEYING, INC.**

---

May 5, 2004


Roy Carver  
Carver Development  
P.O. Box 51505  
Eugene, OR 97405

Re: Acreage of property at 520 Ridgewood Drive (Tax map 18-04-13; tax lot 3500)

Based on the legal description of the property (including the recent property line adjustment)  
I have calculated that the total area is 42.2 acres.

Please call if you need any additional information.

Sincerely,

  
Don B. Mogstad, P.E.

(3558L01.WPD)

RETURN TO CASCADE TITLE CO.

CT 207723 ①

## PROPERTY LINE ADJUSTMENT DEED

LEONARD G. CHRISTIE and JUDITH CHRISTIE, as tenants by the entirety, as Grantors, convey the real property described in Exhibit A attached hereto and incorporated herein by this reference, subject to the deed restrictions described in Exhibit E attached hereto and incorporated herein by this reference, to ELIZABETH CARVER ADAMS, TRUSTEE OF THE CARVER TRUST NO. 1 UTA dated September 22, 1988, as Grantee, for the purpose of adjusting the property line along their shared boundary.

This Property Line Adjustment Deed transfers the real property described in the attached Exhibit A from the parcel known as Assessor's Map and Tax Lot No. 18 04 13 00-03802, Tax Account No. 1184314 ("Christie property") to the parcel known as Assessor's Map and Tax Lot No. 18 04 13 00-03500, Tax Account No. 731628 ("Carver property"), as shown on the attached Exhibit B, subject to the deed restrictions described in Exhibit E. The new legal description for the Christie property after the lot line adjustment is described in Exhibit C attached hereto and incorporated herein by this reference, and the new legal description for the Carver property after the lot line adjustment is described in Exhibit D attached hereto and incorporated herein by this reference.

The deed whereby Grantors acquired title to the transferred property was recorded on September 17, 1985, Recorder Reception No. 8532956, Lane County Official Records. The deed whereby Grantee acquired title to the transferred property to which the transferred property is adjacent to was recorded on December 18, 1996, Records Reception No. 9684433, Lane County Official Records.

The true consideration for this conveyance is \$150,000.

2156DEC.31'97#02REC 35.00

2156DEC.31'97#02PFUND 10.00

Until a change is requested, all tax statements for Assessor's Map and Tax Lot No. 18 04 13 00-03500, Tax Account No. 731628 are to be sent to the following address:

Carver Trust No. 1  
P.O. Box 223  
Florence, OR 97439

2156DEC.31'97#02A&T FUND 20.00

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated effective this 19th day of Dec., 1997.

GRANTORS:

Leonard G. Christie

Judith Christie

GRANTEE:

Elizabeth Carver Adams, Trustee of the  
Carver Trust No. 1 UTA dated Sept. 22,  
1988

AFTER RECORDING RETURN TO:

Stan G. Potter  
975 Oak Street, Suite 800  
Eugene, OR 97401

9788122

STATE OF OREGON

County of Lane

SS.

This instrument was acknowledged before me on the 19<sup>th</sup> day of Dec., 1997, by LEONARD G. CHRISTIE and JUDITH CHRISTIE.



Sunny L. Maloy  
Notary Public for Oregon

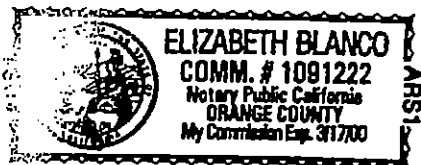
My Commission expires: 11/5/00

STATE OF CALIFORNIA

County of Orange

SS.

This instrument was acknowledged before me on the 29<sup>th</sup> day of December, 1997, by ELIZABETH CARVER ADAMS, TRUSTEE OF THE CARVER TRUST NO. 1 UTA dated September 22, 1988.



Elizabeth Blanco  
Notary Public for California

My Commission expires: 3/17/00

9788122

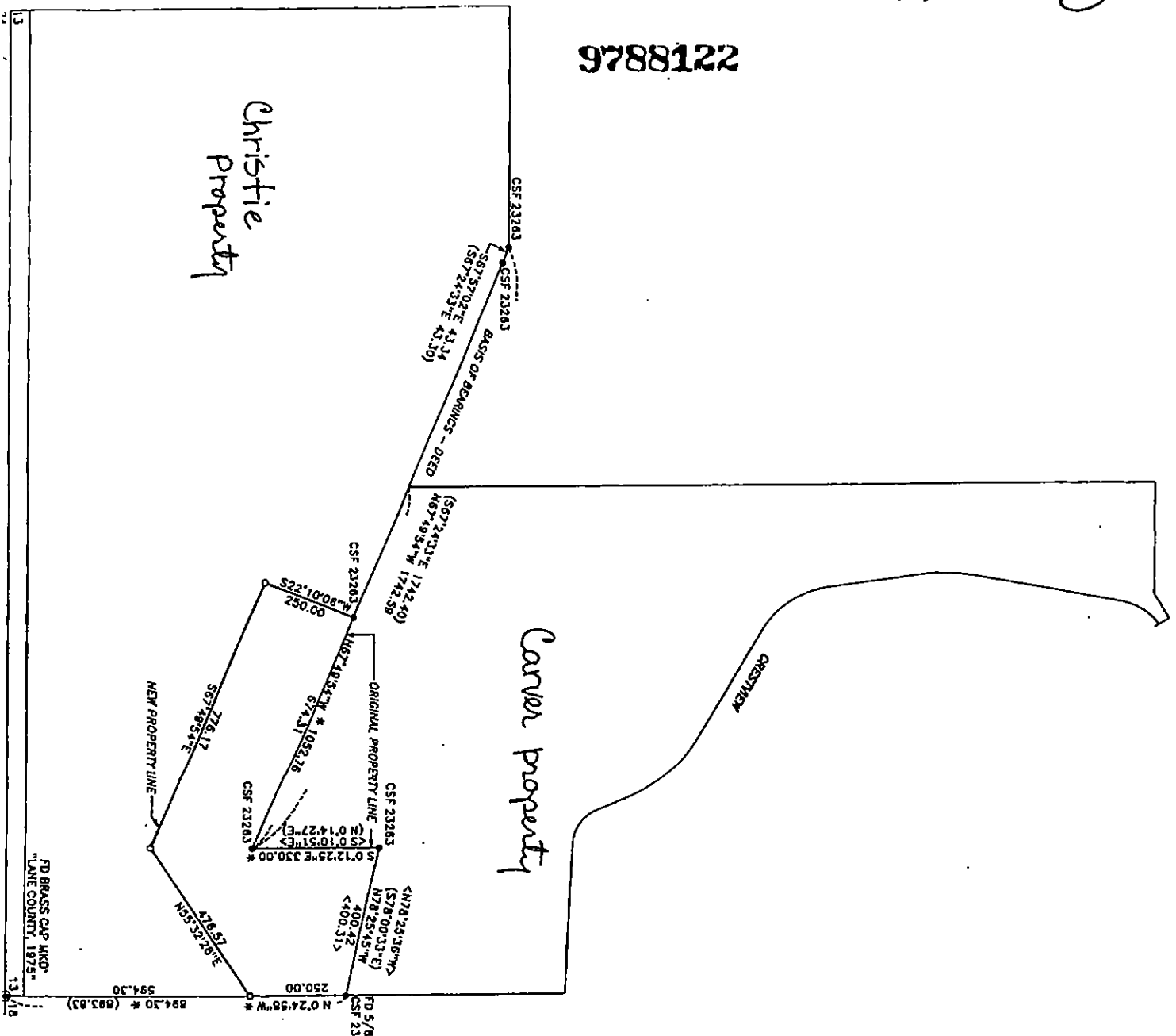
CT 207723 (1)

EXHIBIT A

Beginning at the brass cap marking the Southeast corner of Section 13, Township 18 South, Range 4 West of the Willamette Meridian; thence North  $0^{\circ} 24' 58''$  West 894.30 feet along the East line of said Section 13 (being on a direct line towards the 5/8 inch iron pin marking the Southwest corner of the William Luckey Donation Land Claim No. 52 in said Township and Range) to the true point of beginning; thence North  $78^{\circ} 25' 36''$  West 400.31 feet along a line as monumented in Survey No. 20763 to a point marked by an iron pin set at an angle therein; thence South  $0^{\circ} 10' 51''$  East 330.00 feet continuing along said line to a point marked by an iron pin set at an angle therein; thence North  $67^{\circ} 49' 54''$  West 674.31 feet continuing along said line to a point; thence South  $22^{\circ} 10' 06''$  West 250 feet; thence South  $67^{\circ} 49' 54''$  East 776.17 feet; thence North  $55^{\circ} 32' 28''$  East 476.57 feet to said East line of Section 13; thence along said East line North  $0^{\circ} 24' 58''$  West 250.00 feet to the true point of beginning in Lane County, Oregon.

2204

Christie  
Property



Carver property

**CRISTIAN**

THE PURPOSE OF THIS SURVEY WAS TO MONUMENT A PROPERTY LINE ADJUSTMENT. EXISTING BOUNDARY LINES WERE BASED ON MONUMENTS INDICATED FOUND FROM CSF 24686 AND CSF 22263. A NEW PROPERTY LINE WAS ESTABLISHED AT THE DIRECTION OF THE OWNER.

- INDICATES 5/8" x 24" IRON ROD SET WITH YELLOW PLASTIC CAP MARKED "WOBBE - PLS 1093".  
 ● INDICATES 5/8" IRON ROD FOUND WITH YELLOW PLASTIC CAP MARKED "CASHWELL - PLS 49\*", UNLESS INDICATED OTHERWISE.  
 ( ) INDICATES RECORD DATA PER CSF 2468B.  
 \* INDICATES MEASURED DATA SAME AS CSF 23263 AND DEED RECORDED, DECEMBER 18, 1996, R/R# 9684433, L.C.O.R.  
 < > INDICATES RECORD DATA PER CSF 23263.

SCALE  
1"=200'

<p> <b>REGISTERED PROFESSIONAL LAND SURVEYOR</b>  <i>Walter H. Helle</i>          CRENSHAW          EUGENE M. WOBBE       </p>	<p> <b>WOBBE &amp; ASSOCIATES, INC.</b>          510 KINGWOOD ST./P. O. BOX 3093          FLORENCE, OR 97439          PROPERTY LINE ADJUSTMENT SURVEY          RVD CARVER          SE 1/4, SEC. 13, T.7S, R.4W W.1/4       </p>	<p>         LAND COUNTY          SURVEYORS OF          FILE NO. <b>344</b>          FILE DATE <b>5-71</b> </p>
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## EXHIBIT C

Beginning at the Northwest corner of the South one-half of the Southeast one-quarter of Section 13, Township 18 South, Range 4 West of the Willamette Meridian; thence East 10 chains; thence South  $67^{\circ} 39'$  East 26.40 chains; thence North 5 chains; thence South  $78^{\circ} 15'$  East 5.25 chains to the East line of said Section; thence South 13.90 chains to the Southeast corner thereof; thence West on the South line of said Section, 40 chains; thence North 20 chains to the place of beginning, in Lane County, Oregon;

EXCEPT: The South 50 feet of the South one-half of the Southeast one-quarter of Section 13, Township 18 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

ALSO EXCEPT: Beginning at the brass cap marking the Southeast corner of Section 13, Township 18 South, Range 4 West of the Willamette Meridian; thence North  $0^{\circ} 24' 58''$  West 894.30 feet along the East line of said Section 13 (being on a direct line towards the  $\frac{5}{8}$  inch iron pin marking the Southwest corner of the William Luckey Donation Land Claim No. 52 in said Township and Range) to the true point of beginning; thence North  $78^{\circ} 25' 36''$  West 400.31 feet along a line as monumented in Survey No. 20763 to a point marked by an iron pin set at an angle therein; thence South  $0^{\circ} 10' 51''$  East 330.00 feet continuing along said line to a point marked by an iron pin set at an angle therein; thence North  $67^{\circ} 49' 54''$  West 674.31 feet continuing along said line to a point; thence South  $22^{\circ} 10' 06''$  West 250 feet; thence South  $67^{\circ} 49' 54''$  East 776.17 feet; thence North  $55^{\circ} 32' 28''$  East 476.57 feet to said East line of Section 13; thence along said East line North  $0^{\circ} 24' 58''$  West 250.00 feet to the true point of beginning in Lane County, Oregon.

## EXHIBIT D

Beginning at the brass cap marking the Southeast corner of Section 13, Township 18 South, Range 4 West of the Willamette Meridian; thence North  $0^{\circ} 24' 58''$  West 894.30 feet along the East line of said Section 13 (being on a direct line towards the  $\frac{5}{8}$  inch iron pin marking the Southwest corner of the William Luckey Donation Land Claim No. 52 in said Township and Range) to the true point of beginning; thence North  $78^{\circ} 25' 36''$  West 400.31 feet along a line as monumented in Survey No 20763 to a point marked by an iron pin set at an angle therein; thence South  $0^{\circ} 10' 51''$  East 330.00 feet continuing along said line to a point marked by an iron pin set at an angle therein; thence North  $67^{\circ} 49' 54''$  West 1052.76 feet continuing along said line to a point; thence North 1959.93 feet along a line which passes through a point bearing, by record, South  $89^{\circ} 42'$  East 60.00 chains from the West one-quarter corner of said Section 13; thence East 302.03 to a point; thence North  $59^{\circ} 08'$  East 77.67 feet to an iron pin set in Survey No. 13174 and being the Southwest corner of the end of Ridgewood Drive; thence South  $30^{\circ} 21' 15''$  East 43.02 feet across the end of Ridgewood Drive to a point on the Northerly line of that tract conveyed by that instrument recorded May 15, 1983, Reception No. 8327362, Lane County Official Records; thence North  $31^{\circ} 04' 37''$  West 12.20 feet along said Northerly line of said tract to the Northwest corner thereof; thence along the West line of said tract as follows: along the arc of a curve to the left having a radius of 164.44 feet to a point which bears South  $32^{\circ} 14' 30''$  West 118.97 feet from the last described point; thence South  $11^{\circ} 01' 59''$  West 367.07 feet to a point; thence along the arc of a curve to the left having a radius of 511.69 feet to a point which bears South  $1^{\circ} 36' 12''$  West 167.67 feet from the last described point; thence South  $7^{\circ} 49' 35''$  East 236.17 feet to a point; thence along the arc of a curve to the left having a radius of 234.48 feet to a point which bears South  $33^{\circ} 53' 12''$  East 206.02 feet from the last described point; thence South  $59^{\circ} 56' 49''$  East 335.51 feet to a point; thence along the arc of a curve to the right having a radius of 374.06 feet to a point which bears South  $40^{\circ} 50' 12''$  East 244.93 feet from the last described point; thence South  $21^{\circ} 43' 35''$  East 81.70 feet to a point; thence along the arc of a curve to the left having a radius of 99.29 feet to a point which bears South  $54^{\circ} 43' 35''$  East 108.16 feet from the last described point; thence South  $87^{\circ} 43' 35''$  East 400.31 feet continuing along said line to a point on the east line of said Section; thence South  $0^{\circ} 24' 58''$  East 579.59 feet to the true point of beginning, in Lane County, Oregon.

ALSO: Beginning at the brass cap marking the Southeast corner of Section 13, Township 18 South, Range 4 West of the Willamette Meridian; thence North  $0^{\circ} 24' 58''$  West 894.30 feet along the East line of said Section 13 (being on a direct line towards the  $\frac{5}{8}$  inch iron pin marking the Southwest corner of the William Luckey Donation Land Claim No. 52 in said Township and Range) to the true point of beginning; thence North  $78^{\circ} 25' 36''$  West 400.31 feet along a line as monumented in Survey No. 20763 to a point marked by an iron pin set at an angle therein; thence South  $0^{\circ} 10' 51''$  East 330.00 feet continuing along said line to a point marked by an iron pin set at an angle therein; thence North  $67^{\circ} 49' 54''$  West 674.31 feet continuing along said line to a point; thence South  $22^{\circ} 10' 06''$  West 250 feet; thence South  $67^{\circ} 49' 54''$  East 776.17 feet; thence North  $55^{\circ} 32' 28''$  East 476.57 feet to said East line of Section 13; thence along said East line North  $0^{\circ} 24' 58''$  West 250.00 feet to the true point of beginning in Lane County, Oregon.

CT 20772 3(1)

9788122

## EXHIBIT E

This Property Line Adjustment Deed transfers the real property described in Exhibit A subject to the following deed restrictions, which deed restrictions shall be and constitute covenants running with the land that shall benefit the Christie Property described in Exhibit C, and shall burden the Carver property described in Exhibit D with respect to paragraph number 2 below only, for a seventy-five (75) year period commencing on the date on which this Property Line Adjustment Deed is recorded:

1. *Improvements on Exhibit A Property.* No buildings, structures or other improvements shall be permanently installed, placed or constructed on, over, upon, or under the real property described in Exhibit A (which by this Property Line Adjustment Deed is a part of the Carver property described in Exhibit D), except for: (a) wire fencing that may be installed along the perimeter boundary of the Carver property described in Exhibit A, which is a portion of Exhibit D, (b) landscaping consisting of plant material, and (c) except for structures or other improvements that are no more than thirty-six inches (36") above grade.

2. *Improvements on Exhibit D Property.* No buildings, structures or other improvements, permanent or temporary, shall be installed, placed or constructed on, over, upon, or under the Carver property described in Exhibit D that are visible from the southerly line of the property described on Exhibit A.

3. *Removal of Trees on Exhibit A Property.* No tree larger than ten inches (10") DBH shall be cut down or removed from the property described on Exhibit A without the prior written consent of Grantors or their heirs, assigns or other successors hereunder, unless: (a) Grantee (or an assign or other successor of Grantee hereunder) is required by law to do so (for example, to provide a code-required fire break), or (b) Grantee (or an assign or other successor of Grantee) has first paid Grantors (or their heirs, assigns or other successors hereunder) the sum of Two Thousand Dollars (\$2,000) for each tree cut down or removed. For purposes of this paragraph, the word "tree" includes, but is not limited to, all standing trees and timber, whether dead or alive, and all wood material.

State of Oregon

County of Lane — ss.

I, the County Clerk, in and for the said County, do hereby certify that the within instrument was received for record at

'97 DEC 31 AM 9:48

Reel **2371R**

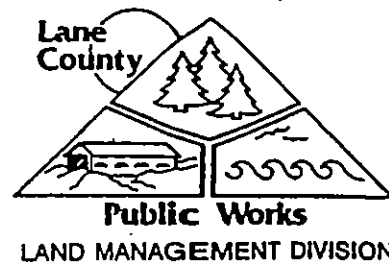
Lane County OFFICIAL Records  
Lane County Clerk

By: \_\_\_\_\_

*Daniel S. Sucha*

County Clerk

2200



Date: MAY 26, 1998

APPLICANT: HARRY TAYLOR  
P.O. BOX 1420  
VENETA, OR. 97487

OWNER: CARVER TRUST I  
2875 BAKER BLVD  
ELGEME, OR. 97403

PA: 1162-9B

RE: Report and Verification of a Legal Lot  
 Tax Map: 18-04-13-00 Taxlot: 3500

A more exact description by reference to Deed or Land Sales Contract  
 is PARCEL 2 OF MINOR PARTITION, M152-79

Based upon the Findings provided in this report, the above referenced property constitutes a legal lot, which means:

1. Ownership to this property may be conveyed with the assurance that such a conveyance would not require approval by Lane County land division regulations; and
2. Lane County recognizes this property as a legally separate unit of land for the purposes of development. Development would still be subject to applicable zoning, sanitation, access and building regulations.

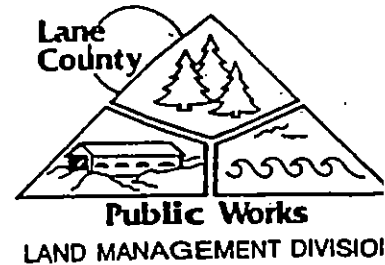
#### Findings

1. The subject property was created as a separate parcel on APPROVED ON MARCH 30, 1979  
 See attached instruments PARCEL 2 OF MINOR PARTITION  
M 152-79
2. The creation of the subject property as a separate parcel complied with all effective land division, zoning and comprehensive plan regulations, and it therefore constitutes a legal lot:

#### a. Land division regulations:

[ ] When the subject parcel was created, there were not land division regulations in effect to govern its creation. Lane County did not adopt applicable regulations for this kind of division until \_\_\_\_\_.

[ ] There were land division regulations in effect governing the creation of this parcel, and the creation of this parcel was specifically exempted by these regulations from compliance because THE PARCEL WAS ESTABLISHED BY AN APPROVED MINOR PARTITION.



b. Zoning regulations:

- [ ] When the subject parcel was created, there were no zoning regulations in effect at this time. The zoning for this property was adopted on \_\_\_\_\_.
- [ ] When the subject parcel was created, there were the following zoning regulations in effect which the parcel complied with because THE PARCELS CREATED BY THE MINOR PARTITION MET OR EXCEED THE RR ZONE REQUIREMENTS

c. Additional Comments:

THE ORIGINAL PARCEL 2 (BEING TL 3500) WAS REDUCED IN SIZE IN APRIL 1983. A PROPERTY LINE ADJUSTMENT DEED, SEE REEL 2371-02/9788122, AND SURVEY MAP, SEE C&P# 34328. THE DEED DOES NOT HAVE ALL THE REQUIRED ELEMENTS OF ORS. CHAPTER 92.150 (4). THEREFORE LANE COUNTY DOES NOT RECOGNIZE THE NEW SOUTHERLY PROPERTY LINE.

"This is a preliminary indication that the above referenced property, as further designated on the enclosed map, is a legal lot. The decision that this property constitutes a legal lot will be made at the time of the first permit or application action where a legal lot is required. If the boundaries of this legal lot have changed at the time of a permit or application which requires a legal lot, a new Legal Lot Verification will be required."

Sincerely,

A handwritten signature in black ink, appearing to read "D. G. Nickell".

D. G. NICKELL P.L.S.O.  
Engineering Associate  
541-682-3989

ATTACHMENTS

CC: TRS File

4K

Subj: (no subject)  
Date: 5/23/2004 12:02:01 AM Pacific Daylight Time  
From: RCarverIII  
To: RCarverIII

**92.190 Effect of replat; operation of other statutes; use of alternate procedures.** (1) The replat of a portion of a recorded plat shall not act to vacate any recorded covenants or restrictions.

(2) Nothing in ORS 92.180 to 92.190 is intended to prevent the operation of vacation actions by statutes in ORS chapter 271 or 368.

(3) The governing body of a city or county may use procedures other than replatting procedures in ORS 92.180 and 92.185 to adjust property lines as described in ORS 92.010 (11), as long as those procedures include the recording, with the county clerk, of conveyances conforming to the approved property line adjustment as surveyed in accordance with ORS 92.060 (7).

(4) A property line adjustment deed shall contain the names of the parties, the description of the adjusted line, references to original recorded documents and signatures of all parties with proper acknowledgment. [1985 c.369 §4; 1989 c.772 §24; 1991 c.763 §20]

Subj: (no subject)  
Date: 4/30/2004 10:52:30 AM Pacific Daylight Time  
From: RCarverIII  
To: RCarverIII

**93.600 Description of real property for purposes of recordation.** Unless otherwise prescribed by law, real property shall be described for recordation by giving the subdivision according to the United States survey when coincident with the boundaries thereof, or by lots, blocks and addition names, or by partition plat recording and parcel numbers, or by giving the boundaries thereof by metes and bounds, or by reference to the book and page, document number or fee number of any public record of the county where the description may be found or in such other manner as to cause the description to be capable of being made certain. However, description by tax lot number shall not be adequate. Initial letters, abbreviations, figures, fractions and exponents, to designate the township, range, section or part of a section, or the number of any lot or block or part thereof, or any distance, course, bearing or direction, may be employed in any such description of real property. [1987 c.586 §2; 1989 c.772 §26; 1995 c.382 §10]

Subj: (no subject)  
Date: 4/30/2004 10:55:36 AM Pacific Daylight Time  
From: RCarverIII  
To: RCarverIII

**93.870 Statutory deed forms optional.** The form of deeds set forth in ORS 93.850 to 93.865 are permissive and not mandatory. Other forms of deeds may be used for the conveyance of real property. [1973 c.194 §5]

Subj: (no subject)  
Date: 4/30/2004 11:18:45 AM Pacific Daylight Time  
From: RCarverIII  
To: RCarverIII

## CONSTRUCTION OF STATUTES

**174.010 General rule for construction of statutes.** In the construction of a statute, the office of the judge is simply to ascertain and declare what is, in terms or in substance, contained therein, not to insert what has been omitted, or to omit what has been inserted; and where there are several provisions or particulars such construction is, if possible, to be adopted as will give effect to all.

**174.020 Legislative intent; general and particular provisions; consideration of legislative history.** (1)(a) In the construction of a statute, a court shall pursue the intention of the legislature if possible.

(b) To assist a court in its construction of a statute, a party may offer the legislative history of the statute.

(2) When a general and particular provision are inconsistent, the latter is paramount to the former so that a particular intent controls a general intent that is inconsistent with the particular intent.

(3) A court may limit its consideration of legislative history to the information that the parties provide to the court. A court shall give the weight to the legislative history that the court considers to be appropriate. [Amended by 2001 c.438 §1]

**174.030 Construction favoring natural right to prevail.** Where a statute is equally susceptible of two interpretations, one in favor of natural right and the other against it, the former is to prevail.

Subj: (no subject)  
Date: 4/28/2004 10:47:09 AM Pacific Daylight Time  
From: RCarverIII  
To: RCarverIII

DESCRIPTIONS, INCLUDING THE OREGON COORDINATE SYSTEM

**93.310 Rules for construing description of real property.** The following are the rules for construing the descriptive part of a conveyance of real property, when the construction is doubtful, and there are no other sufficient circumstances to determine it:

- (1) Where there are certain definite and ascertained particulars in the description, the addition of others, which are indefinite, unknown or false, does not frustrate the conveyance, but it is to be construed by such particulars, if they constitute a sufficient description to ascertain its application.
- (2) When permanent and visible or ascertained boundaries or monuments are inconsistent with the measurement, either of lines, angles or surfaces, the boundaries or monuments are paramount.
- (3) Between different measurements which are inconsistent with each other, that of angles is paramount to that of surfaces, and that of lines paramount to both.
- (4) When a road or stream of water not navigable is the boundary, the rights of the grantor to the middle of the road, or the thread of the stream, are included in the conveyance, except where the road or bed of the stream is held under another title.
- (5) When tidewater is the boundary, the rights of the grantor to low watermark are included in the conveyance, and also the right of this state between high and low watermark.
- (6) When the description refers to a map, and that reference is inconsistent with other particulars, it controls them, if it appears that the parties acted with reference to the map; otherwise the map is subordinate to other definite and ascertained particulars

## Maplewood Enterprises, Inc.



### Agricultural Consulting

82631 Barbre Road  
Dexter, OR 97431-9726

Phone (541) 937-2719  
E-mail [peday@aol.com](mailto:peday@aol.com)

May 25, 2004

Mr. Roy Carver  
P.O. Box 51505  
Eugene, OR 97405

Dear Mr. Carver:

As you requested I have reviewed my report of July 2003 regarding the parcel of land at 520 Ridgewood Drive, Eugene, Oregon (T18S-04W-Sec. 13 Tax Lot 3500) and amended the report to include the additional agricultural capacity associated with approximately 17 acres of adjacent land (T18S R04W Sec.13 Tax Lot 3508) that is now held by the city of Eugene, Oregon.

It is my understanding that this additional parcel was once a part of the property that was the subject of my original report and that you need a projection of the gross income that would have been associated with the total acreage.

To make this projection, I have used the same methodology as was used in the original report. Definitions and references are the same as in the original report.

The additional land is 66% composed of soils found on the portion of the property originally discussed in my July 2003 report. The remaining 34% of the additional land is Dixonville Silty Clay Loam having slopes of 30-50% (USDA soils mapping symbol 41F).

I have modified Table 1 of the original report to include the productive capacity of the Dixonville soil. I also amended the table to include the added productive capacity of the expanded amounts of soils listed in the original report. The amended table is designated as Table 1B (see page 3).

The new soil involved (Dixonville 41F), shares the same limitations to pond development as the soils noted in Table 2 of the original report. Consequently, there is no change in the situation regarding pond or reservoir development and the additional land does not alleviate the constraint of the land lacking irrigation capacity. I have amended Table 2 to reflect this and have designated it as Table 2B (see page 4).

With the additional land included, the new forage production capacity becomes 298.14 AUM's per year for the combined properties. On an annualized basis this would project a carrying capacity of 24.845 Animal Units (i.e., 24.845 cows or their equivalent).

Using the same economic analysis approach as in the original report (gross annual sales per cow of \$422.60) the amended income projection amounts to \$10,499.50 per year.

This is equal to only 52.5% of the income limit associated with the Marginal Lands criteria you are addressing. Even with the extra capacity contributed by the additional 17 acres, the conclusions arrived at in the initial report remain as originally stated.

Please contact me if you have additional questions about this property.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul E. Day". The signature is fluid and cursive, with a large initial "P" and "D".

Paul E. Day, Agricultural Consultant  
Maplewood Enterprises, Inc.  
82631 Barbre Road  
Dexter, Oregon 97431

**Table 1B. PASTURE PRODUCTION CAPACITY  
Carver Property, Eugene, OR**

Soil Series Designation	Percent Slope	Acres In This Series	AUMs <sup>1</sup> /Acre <sup>2</sup> In This Series	AUMs In This Series
Dixonville-Philomath-Hazelair Complex (43C)	3 – 12	26.135	4	104.54
Dixonville-Philomath-Hazelair Complex (43E)	12 – 35	4.68	4	18.72
Dupee (45C)	3 – 20	15.714	8	125.71
Witzel (138 E)	3 - 30	3.622	4	14.49
Dixonville (41F)	30 - 50	5.78	6	34.68
<b>Totals</b>	<b>---</b>	<b>55.931</b>	<b>---</b>	<b>298.14</b>
<b>Animal Units Capacity (AUM's / 12)</b>				<b>24.845</b>

<sup>1</sup> An Animal Unit Month (AUM) is a measure of forage productive capacity and is generally defined as the amount of feed needed to care for a 1000 lb. cow (or the equivalent) for a 30 day period. Thus, 12 AUMs of feed are required to care for a cow for one year. Individual soil class capacities are listed in Table Five of the SCS Reference noted earlier and are based on an assumption of high level management.

<sup>2</sup> Non-irrigated.

**Table 2B. POND LIMITATIONS**  
**Carver Property, Eugene, OR**

Soil Series Designation	Pond Limitations	
	Degree	Cause
Dixonville-Philomath-Hazelair Complex (43C)	Moderate To Severe	Slope, depth to rock
Dixonville-Philomath-Hazelair Complex (43E)	Severe	Slope
Dupee (45C)	Severe	Slope
Witzel (138 E)	Severe	Slope, depth to rock
Dixonville (41F)	Severe	Slope

#5

The space on this page is provided for your written comments.

File No.: PA 03-5901  
 Applicant: Julia Carver / Harry Taylor  
 TRS/TL: 18-04-13 #3500

You may write your comments on this page and return this document to the attention of Thom Lanfear, Lane County Land Management Division, Public Service Building, 125 East 8th Ave., Eugene, OR. 97401. ... Fax 687-3947 ...

Date: May 9, 2004

From: Wayne Wood

181 Ridgewood Drive

Eugene, OR 97405

Comments:

1. This proposal was obviously done by and/or for a professional land developer. Apparently, the land was not bought for a personal residence, as originally stated, but as an investment the Carvers now want to develop.
2. No mention was made of the graded graveled one-lane road leading to a graded graveled area on the south side of the Subject Property, the Carvers had built, the first year they owned the property (I've indicated its location on the enclosed map). At the time, Roy Carver stated it was for his residence, the only one to be built on the property. Yet, this proposal says that the four houses to be built on the property, are to be on the uplands, not to the south. So, what becomes of this south site? Is it to be developed as well, abandoned, or developed at a later date?

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

Date: May 9, 2004

From: Wayne Wood

Comments continued:

3. I would prefer the property not be rezoned, allowing for multiple houses to be built on it. The impact on the property itself and the surrounding area, will be considerably more than the little to no impact that this proposal implies. I cannot cite statutes and statistics, nor quote an "expert" who has looked at an aerial survey of the land, once or twice, like the Carvers have in their proposal. What I can give is information, based on my living on Ridgewood Drive (something the Carvers do not), for sixty years.
4. The Subject Property was part of the Blanton homestead and farm (the crop furrows were visible until the trees were planted). After my parents bought the land, it was used as pasture/grazing land for horses. In the late 1960s, my parents decided to reforest the land and return it to its original state. Which they did. It was not planted as a Christmas tree farm, nor intended to be one. It was intended to be forest land. The closeness of the trees is due to government regulations at the time, and the theory that natural thinning would occur due to some trees not surviving. However, most of the trees survived, growing without human interference, into a natural forest habitat and ecosystem for a variety of mammals, birds, reptiles, and insects. A rare resource, nowadays, especially near a city. The building of one residence on the Subject Property (as per the ODFW standard of one dwelling unit for 40 acres in a Peripheral Big Game Range, which this property is), would have minor impact to this forest land. However, cutting a large portion

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

Date: May 9, 2004

From: Wayne Wood

Comments continued:

4. continued -- of the trees and building several houses on the land, would damage this forest habitat, and displace the animals that live there, causing more conflict between humans and the indigenous animals. For example, more deer hit by cars, lying dead by the side of the road, or suffering with broken legs for several days until they can be put out of their misery. Upsetting incidents to adults, even more so, to children, of which there are more than a dozen, living along Ridgewood Drive.
5. No mention was made of the natural wetlands on the Subject Property, that has been there for decades, sustaining a farm, then grassland, and then a forest habitat. It was still there, in 1997. My family nicknamed the area 'the swamp' (indicated on map), because no trees would grow there, and it is wet most of the year, varying from sippy mud to a pond. Several natural springs flow into this area, which in turn, drains to the south, onto the 53-acre property designated forest land/big game range. Building several houses on the Subject Property would damage this natural water system, not only adversely impacting the Subject Property and its forest habitat, but the property to the south, as well.
6. Access to the Subject Property is via Ridgewood Drive. Ridgewood Drive is a one-lane road in various conditions, ranging from good (which serves most of the current residences), to narrow and poor, to gravel (which fronts the Subject Property). It has two blind curves in it, and winds up a hill at a moderately steep grade.

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

Date: May 9, 2004

From: Wayne Wood

Comments continued:

6. continued -- Residents, guests, mail service, and numerous delivery trucks (especially at 42 Ridgewood Drive, where a congestion problem is already occurring), travel this road throughout the day, every day. Children walk along this road, to and from the school bus stop on Blanton Road. Residents walk and jog along it. Even strangers, sightseeing, or looking for KVAL or another road, travel along Ridgewood Drive. Ridgewood Drive is a busy road, which just handles the current traffic, and is already experiencing traffic problems. For example, near head-on collisions in the blind curves. The most recent incident happening a week ago, between a cement truck and car. Greatly increasing the traffic on Ridgewood Drive, by adding log trucks hauling off the trees removed from proposed home sites, construction workers and equipment, supply trucks, and then more residents and their guests, will increase the traffic congestion and problems beyond what Ridgewood Drive, its side road Pinewood Terrace, and their residents can handle. Traffic congestion, noise pollution (from traffic and construction), and auto/truck emissions pollution, will increase, causing health and safety hazards. Residents will have difficulty using Ridgewood Drive, disrupting their lives. The chance of a serious or fatal accident occurring, will increase. Emergency vehicles may have trouble getting along Ridgewood Drive. For example, if a log truck is coming down Ridgewood Drive, no one, including a fire truck or paramedic unit, can get up Ridgewood Drive. This could mean loss of life or property,

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

Date: May 9, 2004

From: Wayne Wood

Comments continued:

6. continued -- because of the delay. The increase in traffic will also damage the road itself, causing the County and taxpayers more expense in repairs and upkeep, as well as more traffic hazards for the people who travel along Ridgewood Drive. When the Carvers built the short road on the Subject Property, traffic doubled on Ridgewood Drive, causing the above problems. And that was just to build a short gravel road. Rezoning the property and building several houses on it, will double, if not triple, the traffic and problems. Especially, as since the Carvers' road was built, normal traffic useage along Ridgewood Drive has increased. Also, because of the home business being conducted at 42 Ridgewood Drive, several employees' cars and numerous delivery trucks, daily use a small parking area in front of the house, alongside Ridgewood Drive, often partially blocking the road, causing traffic problems. Adding construction, utility, and road improvement traffic and equipment, will make matters along Ridgewood Drive even worst. Its side road, Pinewood Terrace would also be affected. Especially, if the narrow part of Ridgewood Drive, just above Pinewood Terrace, is widened and improved. The equipment and workers will park along Pinewood Terrace, causing problems there. They have, in the past, when Ridgewood Drive has been repaired or repaved, and will, again. I realize that the construction and road improvement traffic would eventually be gone. However, depending on whether the houses are built at the same time, or at different times, and when road improvements are done, the increased traffic could last anywhere

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

Date: May 9, 2004

From: Wayne Wood

Comments continued:

6. continued -- from two to ten years. This is too long a time, to put up with the above conditions and problems. Plus, after the house building and road improvement, there would still be the increased traffic, due to the additional new residents and their guests.
7. Another area affected by this, would be Blanton Road and its residents. Blanton Road is the access road for Ridgewood Drive. Even though it is a paved two-lane road, the additional traffic, congestion, and pollution would cause health and safety hazards along it, especially at the junction of Blanton Road and Ridgewood Drive, where several driveways also converge.
8. I ask that the Subject Property (520 Ridgewood Drive) not be rezoned, because of the negative impact on the land, its forest habitat, access road, and safety and health of the residents along the access road. However, if the Subject Property is rezoned, I feel that the Carvers:
  - a) be responsible for maintaining safe and healthy conditions along Ridgewood Drive, Pinewood Terrace, and Blanton Road
  - b) be responsible for, and pay for, any improvements made to Ridgewood Drive, as well as for any damage to property along Ridgewood Drive and Pinewood Terrace, in making the improvements
  - c) be responsible for, and pay for, repairing any damage to Ridgewood Drive and Pinewood Terrace, as the damage occurs. The damage should be repaired immediately after it occurs, not waiting until all construction is done. So, that residents

Applicant: Julia Carver/Harry Taylor/Roy Carver

TRS/TL: 18-04-13 #3500

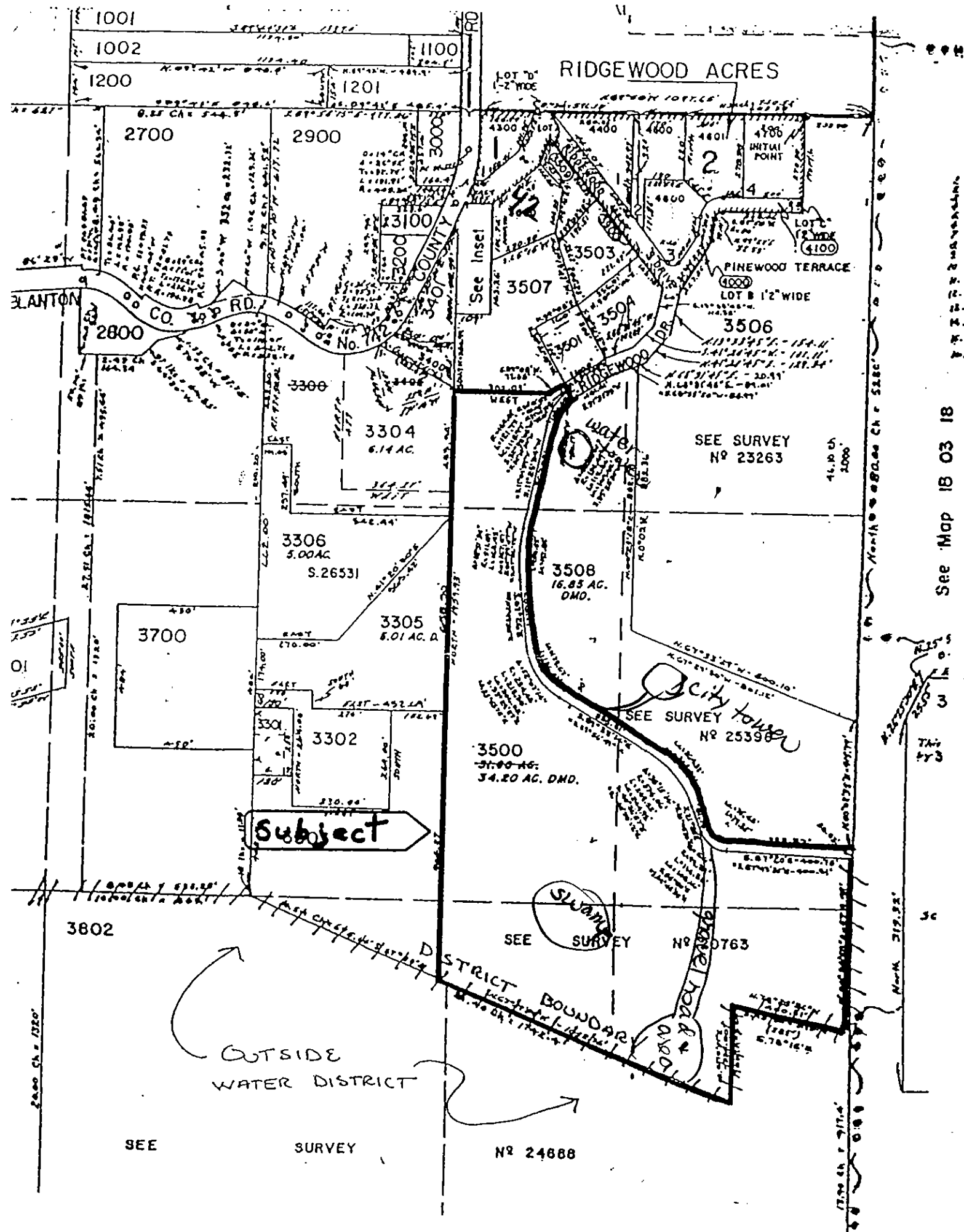
Date: May 9, 2004

From: Wayne Wood

Comments continued:

8. continued --

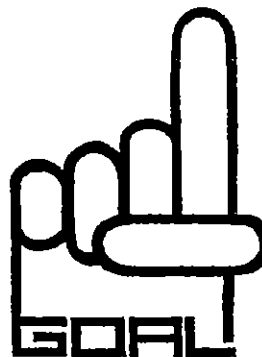
- c) continued -- don't have to put up with damaged-road conditions. Ridgewood Drive and Pinewood Terrace should be in as good, or better, condition than they presently are, when all construction and road work is done.
- d) pay for extending utilities services to the Subject Property and its houses. A question arises here. The proposal states that EWEB's water tank is in the northwest boundary of the Subject Property, and that underground water and electric lines run parallel with the road fronting the property. Unless, the Carvers or EWEB have installed a new water tank recently, EWEB's water tank, that serves Ridgewood Drive, is not on the Subject Property, but in the northwest corner of the City of Eugene's property, below the proposed home sites. Also, unless, utilities were laid to the City's tower, I know of no water or electric lines beyond the water tank. If this is the case, utilities have to be extended to the Subject Property before its houses can be hooked up to them. An expense, the Carvers should pay for.
- e) should not inconvenience residents along Ridgewood Drive, Pinewood Terrace, or Blanton Road, by disrupting utility services or blocking the roads. If any inconveniences occur, the Carvers must resolve the matter immediately.
- f) keep open communication with residents along the before mentioned roads, in order to lessen and/or resolve any problems that may occur.



**GOAL ONE COALITION**

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 Lebanon, Oregon 97355  
 Phone: 541-258-6074  
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 goal1@pacifier.com

REC'D APR 24 2004



April 22, 2004

Lane County Planning Commission  
 125 East 8<sup>th</sup> Avenue  
 Eugene, Oregon 97401

**RE: PA 03-5901, Carver**

Commissioners:

The Goal One Coalition (Coalition) is a nonprofit organization whose mission is to provide assistance and support to Oregonians in matters affecting their communities. The Coalition is appearing in these proceedings at the request of and on behalf of its membership residing in Lane County. This testimony is presented on behalf of LandWatch Lane County and of its President, Robert Emmons as an individual; and of the Coalition.

**INTRODUCTION**

This proposal would redesignate 42.2 acres of land from "Forest Land" to "Marginal Land," and change the zoning of that land from "Impacted Forest Lands (F-2)" to "Marginal Lands (ML)." The proposal would allow development of four dwellings on the subject property at a density of one dwelling per 10 acres.

The subject parcel is identified as 18-04-13 TL 3500. It is located adjacent to the Urban Growth Boundary and Eugene city limits on the city's south side, about ¼ mile south of Blanton Road.

The subject property's northern and eastern boundaries abut the Eugene Metropolitan Plan and UGB, with a portion abutting the Eugene city limits. Properties adjacent to the subject property within the UGB are zoned Suburban Residential (RA) and Low Density Residential (R-1); a 1-acre lot developed with a water tower serving the Solar Heights subdivision is zoned agricultural (Ag). Properties to the north are zoned RA and RR-5. Properties to the west are zoned RR-5. The 53.60 acre parcel to the south is zoned F-2.

ORS 215.327 and LC 16.214 require a minimum parcel size of 20 acres if the parcel is adjacent to land zoned for farm or forest use that would not qualify as marginal land, and otherwise require that parcels be at least 10 acres in size.

The criteria for the designation of marginal land are set out in ORS 197.247 (1991 edition). The Staff Report refers also to Lane County guidelines for interpreting and administering marginal lands provisions, issued by the Board of Commissioners in March 1997. Because the provisions being applied are provisions of state statute, no deference is due or will be given to local interpretations of ORS 197.247.

ORS 197.247 establishes a two-part test for the designation of marginal land. Any proposal for a marginal land designation must first comply with the "income test" requirement of ORS 197.247(1)(a), which requires that the applicant prove that the subject land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation producing \$20,000 in annual gross income or as part of a forest operation capable of producing an average of \$10,000 in annual gross income over the growth cycle.

The applicant's statement asserts that the property was not part of a farm operation that produced the required income over the relevant time period. The applicant's statement does suggest that the property was receiving forest tax deferral and was planted in unspecified conifers during the relevant time period.

The second part of the marginal land test contains three options. ORS 197.247(1)(b)(A) and (B) are "parcelization" tests, which look at parcel sizes of adjacent and nearby lands. ORS 197.247(1)(b)(C) is the "productivity" test, which requires the applicant to demonstrate that the land is predominantly comprised of soils in capability classes V through VIII and is not capable of producing 85 cf/ac/yr of merchantable timber. The applicant's statement at p. 9 states that the applicant has elected to comply with the "productivity" option of the second prong of the marginal lands test.

## ANALYSIS

Because calculation of average income over the growth cycle depends upon assumptions and evidence related to productivity of the proposed marginal lands, this analysis will first address issues concerning the "productivity" test of ORS 197.247(1)(b)(C) and then address "income" test issues relating to ORS 197.247(1)(a).

### **1. The applicant has not established that the soils on the subject parcel are predominantly Class V-VIII.**

Data provided in the applicant's statement indicate that the soil types on the subject property are as follows:

Map #	Soil type	Acres	Area %	Ag. class
43C	Dixonville-Philomath -Hazelair complex (3-12%)	18.825	48.399	VI
43E	Dixonville-Philomath -Hazelair complex (3-12%)	1.145	3.637	VI
45C	Dupee Silt Loam (3-20%)	15.034	38.653	III

138E	Witzel very cobbly loam (3-30%)	3.622	9.311	VI
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The applicant's statement concludes:

"From analysis, 61.347% of the soils on the subject property are rated as Class VI agricultural soils, and 38.653% of the soils are rated as Class III agricultural soils. The soils on the subject property are predominantly Class V and higher and meet the benchmark established by Oregon law to determine the farm land capability threshold for Marginal Lands designation."

The data provided by the applicant does not correspond to available NRCS data, and the applicant's conclusions are not supported by available evidence. The NRCS lists the 43C and 43E units as a complex, and assigns productivity to the individual soil components.<sup>1</sup> The 43C Dixonville component is listed as Capability Class 3e, and the 43E Dixonville component as Class 4e; Philomath, 6s; and Hazelair, 4e. NRCS practice is to use the agricultural capability class for the predominant component, i.e. the one listed first.<sup>2</sup> In this case, that would be the Dixonville component. Therefore NRCS data indicates that 90.689% of the soils on the subject property are Class 4 or better, and 87.052% are Class III.

NRCS soils mapping establishes that the soils on the subject property are not predominantly Class V-VIII. The applicant has the opportunity to provide more site-specific soils mapping. The applicant has not done so. The application to designate the subject property as marginal land cannot be approved.

**2. The applicant has not established that the subject parcel is not capable of producing 85 cf/ac/yr of merchantable timber.**

- a. Neither the applicants nor the applicant's forestry consultant provide data for unrated soils that are equivalent to NRCS data, using methodology approved by the Department of Forestry.**

It is capability or potential for production, measured as cf/ac/yr of commercial tree species, that is at issue in determining a property's suitability for commercial forest uses. *Potts v. Clackamas County*, 42 Or LUBA 1 (2002).

OAR 660-006-0003(1) provides:

"OAR Chapter 660, Division 006 applies to all forest lands as defined by Goal 4."

OAR 660-006-0010 provides, in relevant part:

<sup>1</sup> [ftp://ftp-fc.sc.egov.usda.gov/MO1/tab\\_pdf/oregon/or637/or637yields1.pdf](ftp://ftp-fc.sc.egov.usda.gov/MO1/tab_pdf/oregon/or637/or637yields1.pdf). See Exhibit 3-1.

<sup>2</sup> Letter from Kathi Wiederhold, January 9, 1998. See Exhibit 4.

"Governing bodies shall include an inventory of 'forest lands' as defined by Goal 4[.]  
\* \* \* If site information is not available then an equivalent method of determining forest site suitability must be used."

OAR 660-006-0005(2) provides:

"'Cubic Foot Per Acre' means the average annual increase in cubic foot volume of wood fiber per acre for fully stocked stands at the culmination of mean annual increment as reported by the USDA Natural Resources Conservation Service (NRCS). Where NRCS data *are not available or are shown to be inaccurate*, an alternative method for determining productivity may be used. *An alternative method must provide equivalent data and be approved by the Department of Forestry.*" (Emphasis added.)

It is well established that lack of a soil productivity rating does not mean that a soil has no capability for forest production. An ODF technical bulletin states:

"In many cases soils that are primarily used for agriculture were not given ratings for forestry. However, this does not mean they are not capable of growing trees. On the contrary, they may be highly productive[.]"<sup>3</sup>

James Hecker, NRCS Resource Conservationist, has stated:

"There is a misunderstanding when soils are not rated for forest production. It does not mean these soils are 'nonproductive,' but rather are 'typically' used for agriculture and have been rated for that use with predicted yields and given a Capability Class Rating for crop production."<sup>4</sup>

Thor Thorson, NRCS Soil Data Quality Specialist, in response to the question "Does the lack of [NRCS] data on site productivity indicate a soil is unsuitable for timber production?" has stated:

"No; only that suitable timber sites were not measured at the time the survey was conducted, or since the survey was completed. The soils therefore may or may not be capable of timber production at some level."<sup>5</sup>

James Johnson, Farm/Forest Coordinator with the Department of Land Conservation and Development, has stated that for purposes of OAR 660-06-005(2):

"The applicants cannot simply depend on a 'nonrating' to make a case that soils located on a site are not productive. OAR 660-06-005(2) \* \* \* requires the applicants to provide other methods, with equivalent data, to show the productivity of the subject

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<sup>3</sup> Land Use Planning Notes, Number 3, April 1998, p. 3. See Exhibit 1.

<sup>4</sup> Carlson v. Benton County, 34 Or LUBA 140, 149 (1998).

<sup>5</sup> Carlson v. Benton County, 34 Or LUBA 140, 149 (1998).

soils. A statement that the soils are unrated does not provide a method with data equivalent to NRCS data used to determine productivity."<sup>6</sup>

Forestry expert Marc Barnes has stated:

"[T]he lack of wood fiber productivity data in the Soil Survey of Benton County for certain soil types does not mean that the soil type is unsuitable for wood-fiber production, only that at the time the survey was conducted, wood fiber productivity data was not collected for these soil types, since they were being used predominately for other purposes -- mainly agriculture."<sup>7</sup>

Steve Campbell of the U.S. Department of Agriculture has stated:

"Absence of data does not mean that a soil map unit is not suitable for commercial forest use."<sup>8</sup>

The *Lane County Soil Ratings for Forestry and Agriculture*, explaining Douglas-fir Site Index notations at p. 6, states:

"‘none’ Indicates soil map units that lack site index information on Douglas fir. The soil map unit may have the capacity to produce Douglas fir, but this productivity may be very low to very high. No site index has been collected by the NRCS due to lack of suitable sites or lack of time and or funds."

LUBA rulings have established as law that the lack of a NRCS rating provides no information, quantitative or otherwise, pertinent to the statutory test of whether a soil is capable of producing defined levels of wood fiber. *Carlson v. Benton County*, 34 Or LUBA 140, 149 (1998).

The applicant has submitted a report prepared by Bob Booth, Consulting Forester (Booth Report). Mr. Booth does not represent himself as a soil scientist, and does not indicate that he has done a field survey of the soils on the subject property. The soils shown in the Booth Report for the subject property differ from those given by LCOG and reiterated in the applicant's statement. The Booth report assumes that soils on the subject property are: 43C, Dixonville-Philomath-Hazelair complex (3-12% slope), 17.5 acres, 41.5%; 43E, Dixonville-Philomath-Hazelair (12-35% slope), 11.8%; Dupee silt loam (3-20%), 19.7 acres, 46.7%. No productivity ratings for Douglas-fir or any other species are given in the NRCS Soil Survey for Lane County for these soils.

The Booth report calculates a rating for the Dixonville-Philomath-Hazelair complex by assuming that 41C Dixonville component of the complex, which has an NRCS site index of 120 and cf/ac/yr capability of 152, comprises 35% of the complex. The 43C & E complex is calculated to have a cf/ac/yr capability of 53. As the 43C & E complex comprises 41.5% of

<sup>6</sup> *Carlson v. Benton County*, 34 Or LUBA 140, 149 (1998).

<sup>7</sup> *Carlson v. Benton County*, 34 Or LUBA 140, 149 (1998).

<sup>8</sup> See Exhibit 2.

the subject parcel, the forest productivity of the entire forest parcel is calculated to be 28 cf/ac/yr. This calculation erroneously relies upon the assumption that unrated soils have zero productivity.

The Booth report errs in assigning the 43C and 43E Dixonville-Philomath-Hazelair complex a cf/ac/yr capability of 53. NRCS data for Lane County Area, Oregon assigns this unit a cf/ac/yr capability of 152.<sup>9</sup> The NRCS now reports forest capability for only the most predominant component of a soil complex, assigning that productivity to the complex as a whole. The predominant soil is the one named first in the name of the complex.

The NRCS has explained what a soils complex is:

“A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps.”<sup>10</sup>

NRCS-approved methodology for marginal lands zone change applications uses the capability class for the predominant component.<sup>11</sup> Applicants may choose to submit more detailed information. The applicant has not submitted more detailed soils mapping for the subject property. The applicant’s consultant has merely recalculated forest capability in a manner not consistent with NRCS data or accepted NRCS methodology.

The applicant’s forestry consultant has not used ODF-approved methodology to determine forest capability for unrated soils. The Department of Forestry states that the methodology it approves to determine the productivity of an area is contained in the *Field instructions for forest surveys in Washington, Oregon, and Northern California, USDA Forest Service, PNE Range and Experiment Station*.<sup>12</sup> An independent, knowledgeable person, such as a consulting forester, must measure the trees on the property and calculate the cubic foot site class using the approved methods. Site trees must be carefully selected, and the consultant’s report must provide adequate detail to determine whether the approved methods were followed. ODF approved methodology can be summarized as follows<sup>13</sup>:

1. Plots must be taken to measure the productivity of each different soil type and aspect on the property.
2. Selection of site-trees (trees selected to determine site index) is a critical part of accurately determining the productivity of the land. If insufficient dominant trees exist on the property to determine the site index, site-trees may be selected from other properties with the same aspect, elevation, and soil type.
3. Use the appropriate table to determine site index. For example, King’s Douglas-fir table is used for Douglas-fir and grand fir; Barnes western hemlock table is used for

<sup>9</sup> [http://ftp-fc.sc.egov.usda.gov/MO1/tab\\_pdf/oregon/or637/or637forest.pdf](http://ftp-fc.sc.egov.usda.gov/MO1/tab_pdf/oregon/or637/or637forest.pdf). See Exhibit 3-2.

<sup>10</sup> *Soil Survey of Linn County Area, Oregon, USDA Soil Conservation Service, 1987, p. 17.*

<sup>11</sup> Letter from Kathi Wiederhold, January 9, 1998. See Exhibit 4.

<sup>12</sup> *Land Use Planning Notes, Number 3, April 1, 1998, p. 4.*

<sup>13</sup> *Land Use Planning Notes, Number 3, April 1, 1998, p. 4-7.*

western hemlock and Sitka spruce; Meyer's ponderosa pine table is used for ponderosa pine and Jeffrey pine.

The applicant has not provided any information addressing productivity of the Dupee or Witzel soils on the subject property. The applicant has not established that the methodology used to estimate the productivity of the Dixonville-Philomath-Hazelair complex is accepted by ODF. Assuming that the Philomath and Hazelair components of that complex have zero forest productivity is not ODF accepted methodology.

The methodology used by the applicant's consulting forester does not conform to ODF-approved methodology, as no plots were identified, no site trees measured, and no site index calculations performed. In the absence of data based on accepted methodology establishing that the soils on the subject area are not capable of producing 85 cf/ac/yr of merchantable timber, the applicant's burden is not met.

Because there is no information in the record whatsoever to support the assumption that soils not rated by the NRCS have zero productivity for Douglas-fir, because the productivity given for the Dixonville-Philomath-Hazelair complex differs from NRCS data, and because the soils as listed in the Booth Report differ from those mapped by the NRCS Soil Survey for Lane County, Oregon, information in the Booth Report is not adequate to support a finding that the subject parcel is not capable of producing 85 cubic feet per acre per year of merchantable timber.

**b. The applicants' information and the Booth Report inadequately address the requirements of ORS 197.247(1)(b)(C) because they fail to consider productivity for timber species other than Douglas-fir.**

ORS 197.247(1)(b)(C) establishes that lands can qualify as marginal lands only if they are not capable of producing "eighty-five cubic feet of merchantable timber per acre per year[.]"

The legislature has not defined "merchantable" in ORS Chapter 197. To understand what the legislature intended "merchantable" to mean, it is helpful to consider ORS Chapter 197 in context with other ORS chapters dealing with forestry.

It is also helpful to consider Board of Forestry rules, as the legislature has granted the State Board of Forestry and the Oregon Department of Forestry (ODF) wide authority in matters of forest policy and has assigned them a number of duties under their overall mission to "provide stewardship for Oregon's forests." ORS 526.016(1) provides, in relevant part:

"The State Board of Forestry shall supervise all matters of forest policy and management under the jurisdiction of this state[.]"

ORS 526.008 explains the relationship of the State Forestry Department to the State Board of Forestry:

"The State Forestry Department consists of the State Forester and the deputy, assistants and employees of the forester, acting under direction of the State Board of Forestry."

In ORS Chapter 321, which deals with timber and forestland taxation, "merchantable stand of timber" is defined to mean "any stand on forestlands containing living or dead timber which is being or can be harvested." ORS 321.005(8). A forest product is "merchantable" if it is salable, regardless of whether sold for profit or loss. *Ellingson Lumber Co. v. Department of Revenue*, 8 OTR 273 (1980).

In ORS Chapter 527, which deals with forest practices, "forestland" is defined to mean "land that is used for the growing and harvesting of forest tree species, regardless of how the land is zoned or taxed or how any state or local statutes, ordinances, rules or regulations are applied." ORS 527.620(7). "Forest tree species" is defined to mean "any tree species capable of producing logs, fiber or other wood materials suitable for the production of lumber, sheeting, pulp, firewood or other commercial forest products[.]" ORS 527.620(6).

The Board of Forestry has adopted rules relevant to the meaning of "merchantable." OAR 629-600-0100(12) defines "commercial" and provides, in relevant part:

"'Commercial' means of or pertaining to the exchange or buying and selling of commodities or services. This includes any activity undertaken with the intent of generating income or profit[.]"

OAR 629-610-0050 governs acceptable species for reforestation and provides further guidance on what constitutes a "commercial" forest tree species. It states, in relevant part:

"(b) The species must be capable of producing logs, fiber, or other wood products suitable in size and quality for the production of lumber, sheeting, pulp or other commercial forest products; and

"(c) The species must be marketable in the foreseeable future."

An evaluation of a property's capacity for forest production must consider productivity for *all* merchantable forest tree species, not just Douglas-fir. Merchantable hardwoods include black cottonwood, Oregon ash, Oregon white oak, red alder, bigleaf maple and hybrid poplar. Merchantable conifers include ponderosa pine, grand fir, western red cedar, western hemlock, and KMX.<sup>14</sup>

An OSU Extension publication addresses the establishment and management of ponderosa pine stands in the Willamette Valley.<sup>15</sup> That publication lists all of the soil units found on the subject property as supporting ponderosa pine. The Booth report mentions ponderosa pine, but simply concludes without providing any evidence or data that "[t]he subject's site is too

<sup>14</sup> *The Woodland Workbook*, R. E. Duddles and C. G. Landgren, Oregon State University Extension Service, EC 1196, November 1999, pp. 2-3. See Exhibit 5.

<sup>15</sup> Fletcher, *Establishing and Managing Ponderosa Pine in the Willamette Valley*, EM 8805.

limited in capacity to allow many of the pines to grow to maturity and contribute to a significant commercial forest.”

The Booth report continues:

“Ponderosa pine log grades range from Grade #1 being most free of knots to Grade #6, having many large knots. When mature, Ponderosa pine near the valley floor grows in poor form and usually produces lower grades such as Grades 5 (\$470/mbf) and 6 (\$295/mbf). The return on an investment in pine culture of large pine logs in Grades #5 and #6 provides little incentive to the land owner to grow pine on sites that have marginal or insufficient growing capacity.”

The Booth report’s analysis, which focuses on prices as an incentive to a property owner, does not address and is not responsive to the inquiry required by ORS 197.247(1)(b)(C), whether the subject property is *capable* of producing 85 cf/ac/yr of merchantable timber, i.e. ponderosa pine. The question of whether the prospective *income* is sufficient is the subject of another statutory test for marginal land, that of ORS 197.247(1)(a).

KMX is being grown successfully sites in the Willamette Valley that support Douglas-fir and ponderosa pine.<sup>16</sup> OSU researchers have published findings on the productive potential of KMX:

“Producers may use fast growing trees such as KMX pine to speed up the crop cycle of forests and agroforests. The KMX hybrid pine is a cross between knobcone (*Pinus attenuata*) and monterey (*Pinus radiata*) pines. Local experience with KMX is that it grows over twice as fast as Douglas-fir or ponderosa pine on the same sites. This makes possible a 20-25 year timber rotation with KMX.”<sup>17</sup>

In determining the potential productivity of the subject parcel for merchantable timber, productivity for KMX must be considered.

Productivity for hybrid poplar also must be considered. Hybrid poplar has been commercialized to provide chips for the pulp and paper industry, and also provides a variety of commodities, including those destined for the solid wood market.<sup>18</sup> Poplar plantations are commonly found on poorly drained alluvial soils such as those found in the Willamette Valley, where growth rates of 350 to 500 cf/ar/yr after eight years have been realized.<sup>19</sup>

<sup>16</sup> The Woodland Workbook, R. E. Duddles and C. G. Landgren, Oregon State University Extension Service, EC 1196, November 1999.

<sup>17</sup> Fletcher and Sharrow, “*Trees and Pastures: 40 Years of Agrosilvopastoral Experience in Western Oregon*,” Agroforestry and Sustainable Systems: Symposium Proceedings, August 1994

<sup>18</sup> “Hybrid Poplar in the Pacific Northwest,” Stanton et al., *Journal of Forestry*, June 2002, p. 28. See Exhibit 6-1, 6-3,4.

<sup>19</sup> “Hybrid Poplar in the Pacific Northwest,” Stanton et al., *Journal of Forestry*, June 2002, p. 29. See Exhibit 6-2.

On the subject property, the 45C Dupee Silt Loam unit comprises 39% of the total area. The Soil Survey describes this unit:

“The Dupee series consists of deep, somewhat poorly drained soils in depressional areas and drainageways on foothills and alluvial fans.”<sup>20</sup>

The Dupee soil unit is a type that successfully supports hybrid poplar. In establishing the potential forest productivity of the subject parcel, productivity for hybrid poplar on the Dupee soils must be considered.

### **3. The income test “forest operation” has not been addressed.**

ORS 197.247(1)(a) imposes an “income test” that must be met for the subject parcel to be redesignated to marginal land. It must be established that the subject property was not managed during the period 1977-1982 as part of a forest operation capable of producing an average of \$10,000 in annual gross income over the growth cycle.

The applicant’s response to this statutory requirement, found on p. 3 of the Applicant’s Statement, refers to the Lane County Marginal Lands Information Sheet, Forest Lands Income Test: “the Subject Property’s soil class is rated 6, is less than 64 acres in size, and therefore qualifies for Marginal Lands designation under the forest income test rule.” Assuming that the county’s Marginal Lands Information Sheet contains applicable decision criteria, and assuming that the application meets these criteria, compliance with Lane County criteria relevant to income capability is not relevant or sufficient to establish compliance with the criteria established by ORS 197.247(1)(a).

The applicant’s statement indicates that the property was receiving forest tax deferral, which requires management for forest uses; and that the subject property was planted in unspecified conifers during the relevant time period. As discussed above, the applicant has not adequately addressed the potential forest productivity of the subject property. Available information indicates that the subject property has substantial productive capability for Douglas-fir, ponderosa pine, KMX, hybrid poplar, and other merchantable forest tree species. That productive capability has not been adequately quantified.

An analysis of income-producing capability must use current timber values to calculate potential gross income over the growth cycle. *See DLCD v. Lane County (Ericsson)*, 23 Or LUBA 33, 36 (1992) (ORS 197.247(1)(a) requires the county to determine whether the forest operation in question is capable of producing an average of \$10,000 in annual gross income over the growth cycle).

The subject property’s capability to produce annual gross income over the growth cycle cannot be established until the subject property’s forest productivity is established. It is the applicant’s burden to establish that the income test of ORS 197.247(1)(a) is satisfied. That burden has not been met.

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<sup>20</sup> Soil Survey of Linn County Area, Oregon, p. 196.

**4. The 53.6 acre F-2 zoned parcel to the south of the subject property does not qualify as marginal land.**

ORS 215.327 provides, in relevant part:

“A county may allow the following divisions of marginal land:

“(1) Divisions of land to create a parcel or lot containing 10 or more acres if the lot or parcel is not adjacent to land zoned for exclusive farm use or forest use or, if it is adjacent to such land, the land qualifies for designation as marginal land under ORS 197.247 (1991 Edition).

“(2) Divisions of land to create a lot or parcel containing 20 or more acres if the lot or parcel is adjacent to land zoned for exclusive farm use and that land does not qualify for designation as marginal land under ORS 197.247 (1991 Edition).”

Parcels adjacent to the subject parcel to the east, north and south are not zoned for farm or forest uses. The adjacent 53.6 acre parcel to the south is zoned F-2, a forest zone. The applicant argues that this parcel would qualify as marginal land, and therefore that the subject parcel may be divided to create parcels of 10 or more acres pursuant to ORS 215.327(1).

The applicant has not established that the adjacent property meets either the forest productivity test or the forest income test. The applicant has provided the following NRCS data for soils on the adjacent property:

Map #	Soil type	area (ac.)	Area (%)	cf/ac/yr	Ag Class
43E	Dixonville-Philomath-Hazelair com.	19.001	35.445	63	VI
43C	Dixonville-Philomath-Hazelair com.	3.474	6.481	54	VI
45C	Dupee Silt Loam	0.016	0.029	0	III
138E	Witzel very cobbly loam	31.116	58.044	0	VI

The applicant concludes that the forest productivity for the adjacent parcel is 25.82 cf/ac/yr, well below the 85 cf/ac/yr threshold for marginal land. As previously discussed in relation to the subject parcel, the applicant's analysis contains several errors.

First, available NRCS productivity data for the Dixonville-Philomath-Hazelair complex is not used. The NRCS Soil Survey for Lane County Area, Oregon assigns the Dixonville-Philomath-Hazelair complex a cf/ac/yr productivity of 152.<sup>21</sup> The applicant has not established that NRCS data is inaccurate or provided more detailed soils mapping for the Dixonville-Philomath-Hazelair complex soils on the adjacent property.

Second, the applicant has improperly assumed that the lack of an NRCS rating for a soil means that the soil has no forest productivity. Lack of a NRCS rating provides no

<sup>21</sup> See Exhibit 3.

information, quantitative or otherwise, pertinent to the statutory test of whether a soil is capable of producing defined levels of wood fiber. It is the applicant's burden to provide evidence in the record sufficient to establish that the statutory criteria are met. The applicant has not provided any information concerning the productivity of nonrated soils.

Third, the applicant has not considered productivity of the adjacent property for species other than Douglas fir. Productivity for other forest tree species, including ponderosa pine, KMX and hybrid poplar, must be considered as well.

The applicant has failed to address the forest income test for the adjacent property. There is no information whatsoever in the record as to forest cover or forest practices during the relevant 1978-82 time period. In the absence of substantial evidence in the record, no determination of compliance is possible.

## CONCLUSION

Information provided by the applicant does not establish that the subject parcel meets either the "forest productivity" or "forest income" test for marginal land. Therefore the request to redesignate the subject parcel from Forest Land to Marginal Land and rezone it from F-2 to ML cannot be approved.

Information provided by the applicant does not establish that the adjacent parcel meets either the "forest productivity" or "forest income" test for marginal land. Therefore the requested 10-acre minimum parcel size cannot be approved.

Respectfully submitted,



Jim Just  
Executive Director

# LAND USE PLANNING NOTES <<<<

NUMBER 3 X APRIL 1998



"STEWARDSHIP IN FORESTRY"

**PURPOSE:** This technical bulletin has been developed to help landowners and local governments when they must use an alternative to the USDA Soil Survey to determine the productivity of forestland. Under OAR 660-06-005 "where SCS data are not available or are shown to be inaccurate, an alternative method for determining productivity may be used. An alternative method must provide equivalent data and be approved by the Department of Forestry." This paper describes the methodology that the Department approves and provides guidance and other information necessary to use that methodology. We have also included some background information to answer some commonly asked questions about the cubic foot productivity class system.



## *Why use the average annual cubic foot production in land use decisions?*

The Department of Forestry advises using the USDA Cubic Foot Productivity Class<sup>1</sup> system, as opposed to other systems of measure, when making land use planning decisions because it measures the relative productivity of the soil, it is not dependent upon the condition of the forest or the species of trees currently growing on the site, and it is more consistent than other measures.

The cubic foot productivity class system ranks soils based upon the mean annual increment measured in cubic feet at the point in time where the culmination of mean annual increment (maximum average annual growth) occurs. This is the average growth rate of the timber over the life of the stand measured at the peak of that average growth rate. The table below shows the potential timber yields of productivity classes 1 - 5 in cubic feet per acre per year (cu ft/ac/yr).

<sup>1</sup>Field instructions for forest surveys in Washington, Oregon, and Northern California. USDA Forest Service, PNW Range and Experiment Station.

### CUBIC FOOT PRODUCTIVITY CLASSES

<u>CODE</u>	<u>POTENTIAL YIELD-MEAN ANNUAL INCREMENT</u>
1	225 or more cuft/ac/yr
2	165 to 224 cuft/ac/yr
3	120 to 164 cuft/ac/yr
4	85 to 119 cuft/ac/yr
5	50 to 84 cuft/ac/yr

Cubic foot productivity class was developed to compare the relative productivity of different soils. Other measures which might be used to compare different parcels, such as site class or site index, are not consistent between species and authors. Site class is commonly used on the west side to describe the productivity of Douglas-fir forests, but site class is only used for Douglas-fir and not for other species. Site index is calculated as tree height divided by tree age at a base age of 100 or 50. Since on the same area, in the same length of time, different species grow to different heights, site index is not consistent between species.

For example cubic foot productivity class III can produce between 120 and 164 cubic feet per acre per year from a fully stocked natural stand. In the next column is a comparison with several species and site indexes.

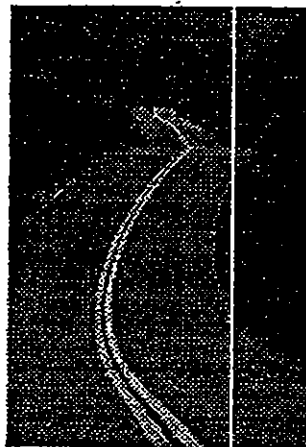
### CUBIC FOOT PRODUCTIVITY CLASS 3

(120 - 164 cuft/ac/yr)

Site-Index Equal to Productivity Class III

Douglas-fir	
(100 yr Site Index)	130 - 160
Western Hemlock	
(100 yr Site Index)	100 - 110
Ponderosa Pine	
(100 yr Site Index)	120 - 130
White Fir	
(50 yr Site Index)	60 - 70
Engelmann Spruce	
(50 year Site Index)	80 - 90

Another advantage of using cubic foot productivity class is that the ratings are available for most forestland without professional assistance. The published soil surveys contain a rating which can be used by county planners or private landowners to rate productivity and using the information does not require visiting the site or taking measurements.



***Why don't we use board feet instead of cubic feet?***

Cubic foot volume is a form of measurement commonly used in forestry research and forest management planning.

It is a physical measurement based upon the actual volume of wood. On the other hand, board foot volume is based upon a series of rules. The board foot rules were developed to try to determine the amount of lumber which could be sawed (at that time) from a range of different diameter logs. Although its predictive abilities are out of date (1 board foot of log now produces from 1.7 - 2 board feet of lumber), board foot rules continue to be the most common measure used to buy and sell logs in the Northwest. The problem with converting cubic feet to board feet is that the conversion factor is not a constant. Because board foot volume is determined by a rule, one cubic foot of wood from a log with a scaling diameter (small end diameter) of 6 inches contains 3.32 board feet, while one cubic foot of wood from a log with a scaling diameter (small end diameter) of 30 inches contains 6.86 board feet.

Therefore as the average diameter of a stand increases in size, the board foot/cubic foot ratio of the stand also increases. To complicate matters further, the length of the logs cut from the tree affects the conversion from cubic feet to board feet. Since trees are tapered and board foot is measured from the small end of the log, cutting the tree into different length logs changes the number of board feet contained in the tree. Because of this difference, the exact number of board feet contained in a stand of timber cannot be determined without knowing how the trees will be bucked into logs.

Because the board feet contained in a stand of timber depends on the average diameter of the stand and the way the trees are bucked into logs, the ratio of board feet to cubic feet is not constant.

Comparisons such as soil productivity are much easier to make based upon a constant volume measure such as cubic feet. That is why it is more commonly used in the more technical forestry applications.

**General Procedures to Challenge the Site Productivity Listed in the Soil Survey**

Before deciding to use an alternative method of measuring the productivity of forestland, documentation should be produced showing that an attempt has been made to use the soil survey and either the soil(s) in question have no rating, or reasons exist indicating that the soil survey may be inaccurate. Where either of these two circumstances exist, a soil scientist from the USDA Natural Resource Conservation Service (NRCS, formerly SCS) should be contacted.

In many cases soils that are primarily used for agriculture were not given ratings for forestry. However, this does not mean they are not capable of growing trees. On the contrary, they may be highly productive, and a NRCS soil scientist may be able to provide a rating of that soil's forest capability. An NRCS soil scientist should also be able to advise you about the procedures used to conduct the soil survey and the accuracy of that survey as it relates to the property and soils in question. The advice received may save both the land owner and local official time and money.

Because the soil survey is not site specific information, The Department of Forestry has agreed to approve methods that would allow a land owner to use site specific information to determine the productivity of the land when applying for a dwelling or other land use decision.

The process should work something like this:

1. The Department of Forestry has approved a methodology for calculating site productivity (the details are described below in this document). When the landowner contacts the county with concerns about the productivity rating of their property, they are provided with information about the required methodology.
2. The landowner must have an independent, knowledgeable person, like a consulting forester, measure the trees on the property and calculate the cubic foot site class using the approved methods. Plots must be taken to measure the productivity of each different soil type and aspect on the property. The consultant must use care when selecting site trees to obtain an accurate measurement, and the consultant's report must provide adequate detail to determine whether the approved methods were followed.
3. The consultant shall provide a copy of the report to the county to use in making land use decisions. If the county has

questions about whether the consultant followed the methodology, the Department of Forestry may need to review the report. However, because this is a land use decision, the county must make the final decision to accept or reject the work of the consultant.

#### **Methodology Approved by the Department of Forestry for Calculating Site Productivity**

The Department of Forestry does not measure sites for landowners. The landowner needs to have an independent qualified person, such as a consulting forester, take the measurements and calculate the cubic foot site class. The methodology the Department of Forestry approves to determine the productivity of an area is contained in the *Field instructions for forest surveys in Washington, Oregon, and Northern California. USDA Forest Service, PNW Range and Experiment Station*. Equivalent published methodology is more widely available from a Weyerhaeuser research paper, by King<sup>2</sup>.

These papers describe how to select site-trees and calculate site index. A second paper, from the US Department of Agriculture<sup>3</sup>, uses site index information

<sup>2</sup>King, James E. 1966. Site index curves for Douglas-fir in the Pacific Northwest. Weyerhaeuser Forestry Paper No. 8. Weyerhaeuser Forestry Research Center, Centralia, WA.

<sup>3</sup>USDA. 1986. Culmination of mean annual increment for commercial forest trees of Oregon.

(continued on next page)

as determined from on-site measurements to reference a set of cubic foot productivity tables. We approve this method because it is based on site specific measurements and it will produce results that are consistent with the Soil Survey.

A summary of the methodology and the necessary tables to calculate site class for the three most common forest types are included below. The methods listed in this paper can be used in combination with other published site index and yield tables if the site is not suited to one of these species. However, the use of other tables or the use of other species to determine site index must be approved by the Department of Forestry on a case by case basis.

Plots must be taken to measure the productivity of each different soil type and aspect on the property. Selection of site-trees (trees selected to determine site index) is a critical part of accurately determining the productivity of the land.

To be used, site-trees must have remained in a dominant or co-dominant position throughout their life. If the land has been selectively harvested in the past, most or all of the dominant trees in the stand may have been removed. Basing site index calculations on the remaining trees, grown in lower crown positions,

will not accurately measure site productivity. In some cases it may be difficult to find enough site trees on the property to accurately determine productivity. If insufficient dominant trees exist on the property to determine the site index, site-trees may be selected from adjacent properties with the same aspect, elevation, and soil type.

If the parcel is a forest site and no trees are available for site index calculations, or if the site index cannot be determined accurately from the existing timber in the area, then soil survey methodology will be required to accurately assess the site productivity. To map the area and provide site specific data that is more accurate than the USDA Soil Survey will require the landowner to employ a soil scientist to do a higher intensity soil survey. The qualifications and procedures for conducting such a survey are contained in OAR 603-80-0040 (3). This survey must provide detailed information on the soil types represented on the property.

#### General Rules for Selecting Site Trees

1. If possible, use the species that dominates the area. Height from 15 to 20 dominant and co-dominant trees and age counts on about 10 trees should be sufficient to determine site index if the area is homogeneous. Additional plots will need to be taken to represent different soil types and aspects across the property.
2. You may select site trees of different species as long as they use the same site table.

---

Technical Note No. 2. USDA, Soil Conservation Service, Portland, OR. (Note: the SCS - Soil Conservation Service is now the NRCS - Natural Resource Conservation Service)

# EXHIBIT 1-7

3. Site index should not vary by more than 20 or 30 between site trees (as indicated on each site table), unless the difference can be explained by actual site variation. Use the site index tables below to compare site measurements.
4. If you select Douglas-fir or grand fir site trees use the site tree selection method for King's Douglas-fir table, outlined below. For other site tree species, use the site tree selection criteria for other species.

## Method for Selecting Site Trees for King's Site Index Table

(Use for Douglas-fir and grand fir)

1. Within the plot area, locate an approximately circular area that encompasses 25 trees (the "site index clump") and that is representative of the site being sampled. When there is a choice, favor well-stocked areas over sparse areas. When counting trees, include only Douglas-fir with normally-formed tops; do not include understory trees that are both younger and shorter than the general crown canopy.
2. Of these 25 trees, select the 5 with the largest dbh as site trees.
3. Any site tree with a clear history of suppression should be rejected, and the next largest tree selected if it is suitable. However, you may select a suppressed tree over a shorter, suppression-free tree of

the same age.

4. If a 25-tree clump is not available, a smaller clump may be used. You should still limit the site tree subsample to the 1/5 of the trees in the clump with the largest dbh unless this gives you less than three site trees.

## Method for Selecting Site Trees for Other Site Index Tables

1. Select trees that are or have been free from suppression for their entire lives. A tree that has been suppressed will have closely-spaced annual growth rings on all or part of its increment core.
2. Select dominant trees.
3. Trees less than 50 years old are undesirable if older trees are available. For ponderosa pine, trees 60 to 120 years old are most desirable.
4. Site trees should be evenly distributed across the plot area.
5. Select trees that show no signs of top-out, such as crooks or forks, unless these trees are taller than normally-formed trees of the same dbh.
6. If no suitable site trees are available from the property, select dominant trees from a nearby area with the same general aspect, elevation, and soil type. Note the location of the site trees in your report.

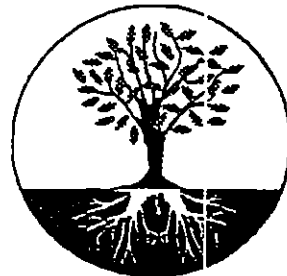
## Site Tables:

Depending on the species of site tree selected, use the appropriate table to determine site index.

1. King's Douglas-fir table. Use for Douglas-fir and grand fir.
2. Barnes western hemlock table. Use for western hemlock and Sitka spruce.
3. Meyer's ponderosa pine table. Use for ponderosa pine and Jeffrey pine. Use this table when in stands that are predominantly pine, or when pine site trees are all that are available (except in the Willamette Valley).

## How to use site tables:

The following site index tables are "upper limit tables." This means that when a tree height indicates a site index that falls between two site indices listed you should use the higher one. Example: Site tree is Douglas-fir, 75 years old at breast height, 115 feet tall. King's Douglas-fir site index table indicates that a height of 115 feet at age 75 falls between site index 80 and 90. Site index is therefore 90.



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EXHIBIT 2.1

United States Department of Agriculture



NRCS

Natural  
Resources  
Conservation  
Service

101 SW Main Street; Suite 1300  
Portland, Oregon 97204

Phone: (503) 414-3009  
Fax: (503) 414-3101

January 14, 2004

Mr. Wayne McKy  
Hugo Neighborhood Association & Historical Society  
6497 Hugo Road  
Grants Pass, Oregon 97256

Dear Mr. McKy:

This is in response to your request for clarification on forest productivity data in the Josephine County Soil Survey in your letter dated December 17, 2003.

In your letter reference is made to "Table 6, Woodland Management and Productivity" and "Table 5, Yields Per Acre of Crops and Pasture" in the published Josephine County Soil Survey Report. This report was published in 1983. Since that time the Natural Resources Conservation Service has adopted an electronic database as the official source of soil survey data. To be sure that your organization is using the current official soil survey data, you should visit our web site at [http://www.or.nrcs.usda.gov/pnw\\_soil/or\\_data.html](http://www.or.nrcs.usda.gov/pnw_soil/or_data.html). A Microsoft Access database for the Josephine County soil survey is available to download from this web site. The site also has tables for forest productivity and crop yields with land capability classes in portable document format (pdf) that can be printed or downloaded. I have enclosed these tables. It's probable that some of the forest productivity, crop yield, and land capability class data has been updated in the Josephine County electronic database and may not agree with some of the entries in the 1983 report.

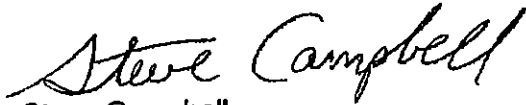
In your letter you asked about the meaning of a "non-rating" in the forest productivity table. During the time that field work is conducted on a soil survey project, suitable stands of commercial forest trees are located. The height and age of at least 5 trees are measured and the soil map unit component where the trees are located is verified by a soil scientist. Generally we do not make an estimate of forest productivity for a soil map unit component unless at least three suitable stands can be located and measured. Suitable stands are normally between about 40 and 80 years of age and relatively free of disease and insect damage.

There may be soil map unit components that are capable of supporting stands of commercial forest tree species, but not enough suitable sites were located during the course of the soil survey to make a statistically valid estimate of forest productivity. In these cases there will not be any forest productivity data in the database, but this does not mean the component is not capable of supporting commercial forest stands.

## EXHIBIT 2.2

You also asked about the relationship between crop yields in the soil survey report and the potential of soil map unit components to support commercial forests. There is no direct relationship between crop yields and forest productivity. For example, many map unit components are on slopes that are generally considered to be too steep for most crops to be grown, but they may be highly productive for commercial forests.

Please contact me at 503-414-3009 if you have any questions.



Steve Campbell  
Soil Scientist

# EXHIBIT 3-1

**Table B. - Land Capability and Yields per Acre of Crops and Pasture - Continued**

Lane County Area, Oregon

Map Symbol and Soil Name	Land Capability		Pasture		Snap Beans		Sweet Corn	
	N	I	N	I	N	I	N	I
			AUM	AUM	Bu	Bu	Tons	Tons
40H: Rock Outcrop	8s	—	—	—	—	—	—	—
41C: Dixonville	3e	—	6.00	—	—	—	—	6.00
41E: Dixonville	4e	—	6.00	—	—	—	—	—
41F: Dixonville	6e	—	4.00	—	—	—	—	—
42E: Dixonville	4e	—	6.00	—	—	—	—	—
Hazelair	4e	—	—	—	—	—	—	—
Urban Land	8s	—	—	—	—	—	—	—
43C: Dixonville	3e	—	6.00	—	—	—	—	6.00
Philomath	8s	—	—	—	—	—	—	—
Hazelair	4e	—	7.00	15.00	—	—	—	—
43E: Dixonville	4e	—	6.00	—	—	—	—	—
Philomath	6s	—	—	—	—	—	—	—
Hazelair	4e	—	—	—	—	—	—	—
44: Dune Land	8e	—	—	—	—	—	—	—
45C: Dupee	3e	—	—	15.00	—	—	—	8.00
46: Eilertsen	2c	2c	15.00	18.00	—	—	—	—
47E: Fendall	6e	—	8.00	—	—	—	—	—
48: Fluvents	7w	—	—	—	—	—	—	—
49E: Formader	6e	—	—	—	—	—	—	—
49G:								

# EXHIBIT 3-2

**Table E1. - Forest Productivity - Continued**

Lane County Area, Oregon

Map Symbol and Soil Name	Potential Productivity			Trees to Manage
	Common Trees	Site Index	Volume of Wood Fiber	
			Cu Ft/Acre	
<b>41F:</b>				
Dixonville	Douglas Fir	109	152	Douglas Fir
	Grand Fir	—	—	Ponderosa Pine
	Oregon White Oak	—	—	
	Pacific Madrone	—	—	
<b>42E:</b>				
Dixonville	Douglas Fir	109	152	Douglas Fir
	Grand Fir	—	—	Ponderosa Pine
	Oregon White Oak	—	—	
	Pacific Madrone	—	—	
Hazelair	—	—	—	—
Urban Land	—	—	—	—
<b>43C:</b>				
Dixonville	Douglas Fir	109	152	Douglas Fir
	Grand Fir	—	—	Ponderosa Pine
	Oregon White Oak	—	—	
	Pacific Madrone	—	—	
Philomath	—	—	—	—
Hazelair	—	—	—	—
<b>43E:</b>				
Dixonville	Douglas Fir	109	152	Douglas Fir
	Grand Fir	—	—	Ponderosa Pine
	Oregon White Oak	—	—	
	Pacific Madrone	—	—	
Philomath	—	—	—	—
Hazelair	—	—	—	—
<b>44:</b>				
Dune Land	—	—	—	—
<b>45C:</b>				
Dupee	—	—	—	—
<b>46:</b>				
Eilertsen	Bigleaf Maple	—	—	Douglas Fir
	Douglas Fir	133	198	Western Hemlock
	Grand Fir	—	—	
	Red Alder	—	—	
	Western Hemlock	—	—	
	Western Redcedar	—	—	

# EXHIBIT 4

## LANE Council of Governments

125 East Eighth Avenue Eugene, Oregon 97401 (541) 682-4283 Fax: (541) 682-4099 TDD: (541) (682-4262

January 9, 1998

TO: File, Lane County Soil Ratings For Forestry And Agriculture (August 1997)

FROM: Kathi Wiederhold

SUBJECT: Agricultural Capability Class

This memo documents the background discussion about the agricultural capability class for soil complexes reported in the document entitled Lane County Soil Ratings for Forestry and Agriculture (August 1997). The document reports the agricultural capability class for only the most predominant component of a soil complex (which is the soil series named first in the name of the complex), as stated on page 8 in the section about source and description of the data.

The Natural Resources Conservation Service (NRCS) has changed how they report agricultural capability classes for soil complexes. Previously, the SCS soil survey (1987 publication date, 1981 date of data) reported a single capability class for each complex, which was the most limiting rating of the individual components of the complex. The information was aimed for use in agricultural management, not for planning.

The NRCS now maintains a state soils data base as its most current source of soils information. The data base replaced the soil survey and the green sheets (called Soil Interpretations Records by the NRCS), which also are now out of date, and is the source for the data in the soil ratings document. The data base reports an agricultural capability class for each component of the complex and does not give a single composite rating for the complex.

I consulted with Kent Howe, Lane County Planning Director, and Thor Thorson, Soil Data Quality Specialist, NRCS, to decide how to report agricultural capability class for soil complexes in the soil rating document. We considered the options of listing the capability class for each component of the complex, listing it for only the most predominant component, and not listing a capability class for complexes. We decided to list the agricultural capability class for only the most predominant component because most users of the document will consult it for the forestry ratings, and it would add a lot of detail and clutter to the document to report the capability class for each component. We further reasoned that most applicants would first test whether they qualify for a resource dwelling by using the capability class for the predominant component of the complex.

NRCS recommends using the agricultural capability class for the predominant component (this is the way the agricultural and forest soil ratings document reports it) for marginal lands calculations on parcels greater than 10 acres in size. The methodology for marginal lands zone change applications also uses the capability class for the predominant component. As always, applicants may choose to submit more detailed information.

For parcels 10 acres or less in size that are mapped as a soil complex, NRCS recommends requiring an on-site investigation to determine the composition of the complex on that specific site. For example, the soil survey describes map unit 43C Dixonville-Philomath-Hazelair as having 30% Dixonville, 30% Philomath, and 25% Hazelair. Due to the less detailed nature of mapping a complex, the soils actually present on a small parcel may be dramatically different than the percentages given in the map unit description, with perhaps some components missing or the components occurring in a different order of abundance.

# EXHIBIT 5-1

**Table 1.—Relative performance ratings for various tree species in climatic regions of western Oregon.**

Coast	Tree performance						Comments
	Level of use <sup>1</sup>	Growth <sup>2</sup>	Shade tolerance <sup>3</sup>	Big game damage <sup>4</sup>	Frost <sup>5</sup>	Drainage <sup>6</sup>	
Douglas-fir	5	5	2	3	2	1	Good on most forest sites with good soil and drainage. Control brush before it overtops seedlings.
Western hemlock	3	5	5	3	3	2	Will tolerate more brush competition than Douglas-fir.
Western redcedar	2	4	4	2	1	4	Good in areas with high water table. Can be browsed heavily.
Grand fir	2	5	3	3	4	4	Good on moist sites.
Sitka spruce	1	5	4	2	3	3	Good only near coast. Spruce tip weevil is a serious pest.
Shore pine	1	1	1	5	5	5	Grows on droughty sand or hardpan sites. Good early growth but slower long-term growth.
Noble fir	1	3	3	4	4	1	For timber planting above 2,000 feet in the Coast Range.
Red alder	1	3	1	3	3	3	Used in riparian and root-rot areas.
Willamette Valley Cascades—west slopes	Level of use <sup>1</sup>	Growth <sup>2</sup>	Shade tolerance <sup>3</sup>	Big game damage <sup>4</sup>	Frost <sup>5</sup>	Drainage <sup>6</sup>	Comments
Douglas-fir	4	5	2	3	2	2	Brush and grass control is important.
Noble fir	2	3	3	4	4	2	Used above 1,500 feet elevation; avoid clay soils.
Grand fir	1	4	3	3	4	3	Good for valley uplands where game damage can be a problem.
Western redcedar	1	3	4	2	1	4	Do not plant on poorly drained clay soils.
Ponderosa pine	2	3	1	5	4	1	Good on sandy soils or clay soils that become droughty in summer.
Western hemlock	1	5	5	3	3	2	Used on north-facing sites.
Cottonwood	1	4	1	5	1	5	Used on river bench alluvial soils.

<sup>1</sup>Level of reforestation use 5 = planted on more than 90% of the sites; 1 = infrequently planted

<sup>2</sup>Height and volume growth 5 = superior; 1 = slow/poor

<sup>3</sup>Shade tolerance 5 = able to grow well with overstory shade; 1 = requires full sunlight

<sup>4</sup>Big game damage 5 = infrequently browsed by deer or elk; 1 = frequently browsed

<sup>5</sup>Frost resistance 5 = high resistance to low temperatures; 1 = easily damaged by frost

<sup>6</sup>Drainage 5 = tolerates poor drainage or some standing water for short periods; 1 = requires well-drained soils

# EXHIBIT 5.2

Table 1 divides western Oregon into coastal and Willamette Valley regions.

Table 2 covers southwest Oregon and eastern Oregon. These tables present considerations in selecting species for reforestation in each region. For example, on a coastal site with moist soils and shade from standing trees, you can consider a shade-tolerant species such as western hemlock.

## Growing exotic trees

Exotic species are trees that are not native to the local area. It would be ideal to find one that would grow faster and taller than the native species. Most tree species from around the world have been tested in the Northwest, but few have proved successful. One exception is "KMX" pine. It's a hybrid cross between knobcone pine and

**Table 2.—Relative performance ratings for various native tree species in southwestern and eastern Oregon.**

Southwest Oregon	Tree performance						Comments
	Level of use <sup>1</sup>	Growth <sup>2</sup>	Shade tolerance <sup>3</sup>	Frost <sup>4</sup>	Heat <sup>5</sup>	Drought <sup>6</sup>	
Douglas-fir	4	5	3	3	3	4	Shade cards may be needed on hot, dry sites.
Ponderosa pine	2	5	2	5	4	5	Gopher control is needed in many areas. Porcupines also can cause damage.
White fir (mid to upper Cascades)	2	4	5	4	2	3	Plant above 3,000 feet on moist, well-drained soil.
Grand fir (mid to lower coast)	2	4	5	3	2	2	Avoid poorly drained soils.
Incense-cedar	1	2	3	4	5	5	Somewhat tolerant of serpentine soils. Pocket rot can be a problem.
<hr/>							
Eastern Oregon	Level of use <sup>1</sup>	Growth <sup>2</sup>	Shade tolerance <sup>3</sup>	Frost <sup>4</sup>	Heat <sup>5</sup>	Drought <sup>6</sup>	Comments
Ponderosa pine	5	4	1	4	5	5	Most widely planted eastside species. Good survival and early growth.
Lodgepole pine	3	4	2	5	5	4	Adaptable to a variety of harsh sites.
Douglas-fir	3	3	3	2	3	4	Risky on south slopes with less than 20 inches annual rainfall.
Grand and white fir	2	3	5	1	2	3	Tolerates some shade in partial-cut situations. Slow growth first 2 years.
Western larch	1	5	1	4	3	3	Excellent juvenile growth.
Engelmann spruce	1	3	4	5	2	2	Planted above 3,500 feet. Good on moist sites.

<sup>1</sup>Level of reforestation use      5 = planted on more than 90% of the sites; 1 = infrequently planted

<sup>2</sup>Height and volume growth      5 = superior; 1 = slow/poor

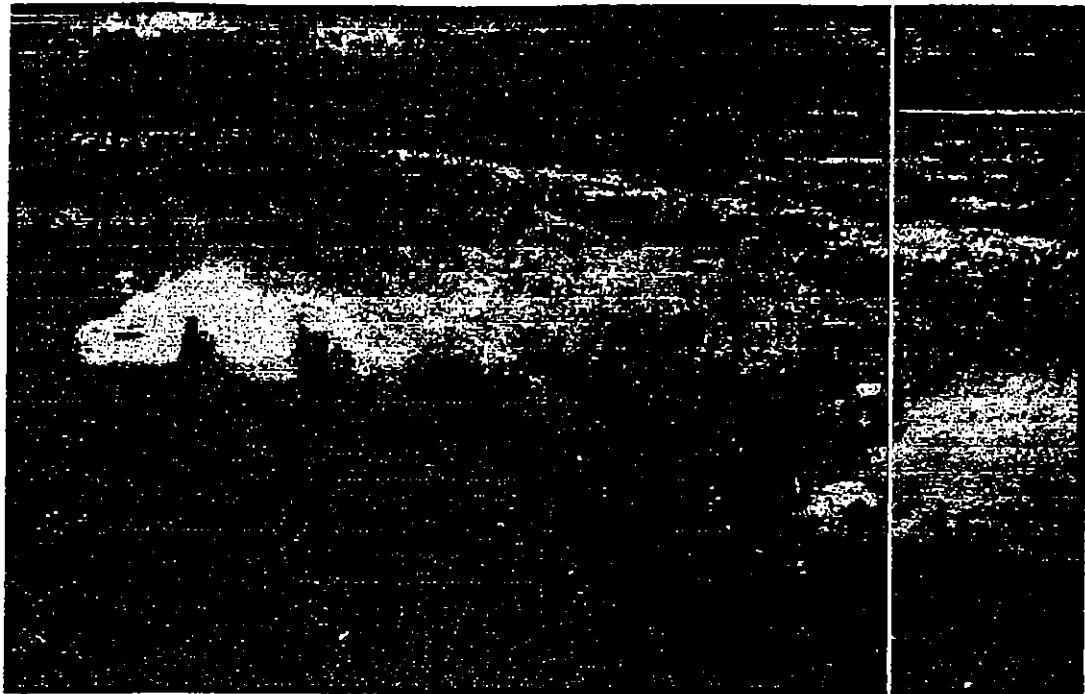
<sup>3</sup>Shade tolerance      5 = able to grow well with overstory shade; 1 = requires full sunlight

<sup>4</sup>Frost resistance      5 = high resistance to low temperatures; 1 = easily damaged by frost

<sup>5</sup>Heat resistance      5 = can stand high temperatures; 1 = sensitive to heat

<sup>6</sup>Drought      5 = can withstand drought; 1 = dies when drought stressed

# EXHIBIT 6-1



Kirk Wallace

## *Hybrid Poplar in the Pacific Northwest*

### The Effects of Market-Driven Management

Brian Stanton, Jake Eaton, Jon Johnson, Don Rice,  
Bill Schuette, and Brian Moser

#### ABSTRACT

Hybrid poplar is a new addition to the Northwest's agricultural economy, with over 50,000 acres currently in production. Originally conceived as feedstock for the energy industry, poplar has been grown primarily as raw material for the paper business. However with falling prices for wood chips, efforts are now under way to manage poplar for the solid wood market. Poplar's utility also extends to its use in the treatment of municipal and industrial wastewater, nutrient removal from agricultural runoff, and phytoremediation of industrial landfills. Future applications are likely to exploit its carbon sequestration ability in the developing markets for tradable pollution credits.

**Keywords:** forest products; plantation forestry; silviculture

The cultivation of hybrid poplar in the Pacific Northwest has advanced during the past 20 years, from research and development to a commercial enterprise occupying

roughly 50,000 acres. Throughout this period, the strategy of poplar management has evolved as landowners have responded to changing commodity prices and advances in environmental

amelioration technology. Envisioned originally as an energy crop during the petroleum crisis of the 1970s, hybrid poplar was instead first commercialized by the pulp and paper industry in the mid-1980s. Today, with chip prices at near-record lows, hybrid poplar plantations are being retooled to provide a variety of commodities, including those destined for the solid wood market. In addition, this relatively new crop is tak-

*Above: Hybrid poplar plantations are only cultivated two years out of eight, far less than the annual cropping systems they replace. The less frequent usage reduces soil erosion.*

# EXHIBIT 6.2

ing an innovative role in environmental and pollution-control technologies that ultimately may be of significant societal consequence with far-reaching economic implications.

## Plantation Management

West of the Cascade Mountains, the largest concentration of poplar plantations is found on the poorly drained silt-loam alluvial soils of the lower Columbia River floodplain. The climate there is relatively mild, and ample rainfall supports growth rates of 350 to 500 cubic feet per acre per year after eight years. Plantations also have been established east of the Cascades on well-drained, loamy, fine sands in the Willamette Valley. Growth rates are slower in regions with more arid conditions, as is fertilization with nitrogen, phosphorus, zinc, and iron. Compared with the west side's alluvial plantations, those of the mid-Columbia River basin achieve superior growth rates of 600 cubic feet per acre per year on six- to seven-year rotations due, in part, to warmer temperatures and virtually cloudless days throughout the growing season.

Nearly all of the acreage on which poplar is now being grown previously had been hayed, pastured, or farmed for a variety of agronomic crops (e.g., corn, wheat, and potatoes). Precise tree spacing, vegetative propagation of selected varieties, and the use of intensive farming practices provide for an extraordinary level of crop uniformity that approaches that of the typical grain or row crop. Stocking rates typically vary from 200 to 900 trees per acre, depending on the intended product. The mainstay of the planting stock derives from first-generation crosses involving four species: native black cottonwood (*Populus trichocarpa*), eastern cottonwood (*P. deltoides*) from the Midwest, Japanese poplar (*P. maximowiczii*), and European black poplar (*P. nigra*). Adventitious rooting by hardwood cuttings of the six possible interspecific combinations is a reliable and inexpensive method of stand establishment that affords the selection and commer-



Hog fuel is ground for use in cogeneration boilers. Multiple markets, including energy feedstock,

are being pursued for the poplar biomass. The wood chips are used for energy feedstock, and the wood chips are used for energy feedstock.

## Energy Feedstock

The use of hybrid poplar for energy feedstock in the Pacific Northwest has been limited to area pulp and paper mills that have periodically used hog fuel residuals from wood-chipping operations to fire their cogeneration boilers. However, electrical generating plants that integrate 50,000 acres of hybrid poplar biomass plantations currently are being sited elsewhere in Minnesota. The configuration of such plantations was at one time designed to follow the woodgrass or silage sycamore model: stands planted at extremely high densities (45,000 stems per acre), harvested annually, and managed by coppice regeneration. Although coppicing greatly reduces the cost of second-rotation site preparation, the need for year-round harvesting (including the summer months when stump sprouting is inconsistent and insubstantial) has mostly precluded its use.

Annual rotations also have been shown to be much more productive (DeBell et al. 1993, 1997). The yield of biomass from commercial west-side plantations stocked at 900 trees per acre and managed on six-year rotations have averaged 37 dry tons per acre, with selected varieties yielding as much as 55 tons.

Burning ground biomass in place of coal or co-firing with coal to produce electricity is a well-developed technology. Although thermal conversion efficiencies for coal and poplar biomass are nearly equivalent, more poplar is required to produce the same quantity of electricity because of its lower caloric content (9 MBtu per ton at a 45 percent moisture content) when compared with coal (20 MBtu per ton) (Wright et al. 1992; Lamarre 1994). The expense of harvesting and chipping operations further contributes to the higher cost of poplar biomass, although a new scheme based on whole-tree processing may significantly lower production and handling costs while improving boiler efficiency (Lamarre 1994; Perlack et al. 1996). However, existing cost comparisons have not accounted for reductions in carbon dioxide, sulfur dioxide, and nitrogen oxide emissions realized through the quantity of coal offset by sustainable management for renewable biomass, an analysis that could be forthcoming if taxes

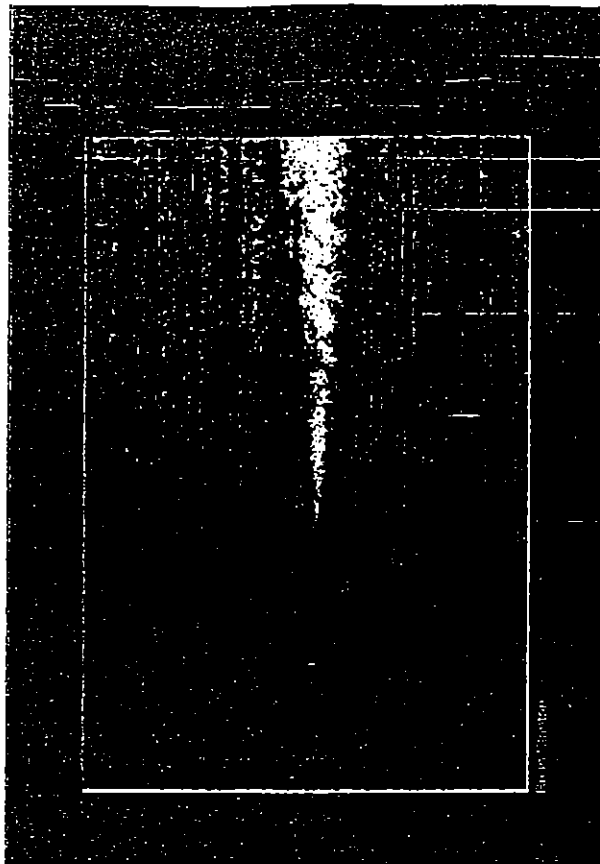
on greenhouse gas emissions or credits for pollution mitigation are enacted in the near future (Hohenstein and Wright 1994).

### Pulp and Paper

Twenty-five years ago, the pulp fiber market in the Northwest—historically dependent on residual chips and sawdust from area lumber mills—was notoriously cyclical, tied as it was to the ebb and flow of the construction industry. Beginning in the late 1970s, some papermakers identified short-rotation plantations located near their mills as providing an opportunity to moderate the fluctuations in fiber pricing. In light of its fast growth and the timely genetic and silvicultural research of R.F. Sterder and P.E. Heilman at the University of Washington and Washington State, hybrid poplar emerged as the prime plantation candidate.

The decision to use poplar was reinforced by a concomitant shift toward paper grades that required hardwood fiber at a time when regional forecasts were projecting drastic shortages in red alder (*Alnus rubra*) fiber, the region's only commercial hardwood (Huddy et al. 1983). In 1982, Crown Zellerbach Corporation began planting hybrid poplar on the lower Columbia River floodplain near Clatskanie, Oregon, and in the mid-Columbia River basin near Boardman, Oregon. Ultimately, James River Corporation developed an 11,000-acre plantation near Clatskanie, while Boise Cascade and Potlatch Corporations independently established a combined total of 40,000 irrigated plantation acres in the Boardman, Oregon, and Wallula, Washington, area. By the mid-1990s, MacMillan Bloedel had planted 6,000 acres of hybrid poplar in the Skagit River Valley.

Plantations managed for clean wood chips often are stocked at a rate of 600 trees per acre and harvested after eight years. A major factor in the determination of rotation length was the transition to desirable pulp charac-



An eight-year-old stand of hybrid poplar (variety 20-88-183) growing on the lower Columbia River floodplain for wood chips for papermaking. Established at 622 trees per acre, the stand carries 165 square feet of basal area per acre.

teristics (e.g., heightened kraft yields and improved pulp strength and drainage) that occurs in poplar during the fifth through eighth years when periodic stand growth rates also are culminating. Trees are sheared and piled with a feller-buncher, forwarded to a landing with skidders, debarked with a chain flail, chipped, and blown into vans for truck delivery to the pulp mills. Processing in the field is cost-effective and allows for just-in-time delivery that maintains the inherent brightness of poplar wood by lessening the time chips are stored in piles. Commercial yields of clean chips vary between 28 and 45 dry tons per acre depending on site quality, with an additional yield of 10 to 15 tons of hog fuel (i.e., combined dry weight of upper stemwood, limbs, bark, and foliage).

Both refiner mechanical and kraft chemical pulping processes have made use of hybrid poplar. It is well-suited to the mechanical process, where the comparatively low wood density of 18 to 21 pounds per cubic foot conserves refining energy. When pulped via the kraft process, however, the low wood

## EXHIBIT 6-3

density reduces digesting efficiency, which yields less pulp per unit of digester volume. Lignin chemical reactions somewhat darken kraft pulps, rendering them less suitable for high-value communication papers without a measure of chlorine-based bleaching. Conversely, poplar's bright wood character is preserved in mechanical pulps with minimal hydrogen peroxide bleaching.

Mechanical pulp has been used to make a wide range of coated and uncoated grades of specialty newsprint. Poplar's short (less than one millimeter) and relatively wide (23–30 micrometers), thin-walled (2.1–2.7 micrometers) fibers of kraft pulp, on the other hand, have proved ideal for the manufacture of bond paper grades. These fibers easily collapse during sheet formation, resulting in a smooth, dense, opaque formation with few surface voids. The same morphologies that lend themselves to collapsible fiber formations also give poplar a low bulk capacity, making it poorly suited to towel and tissue products that place a premium on softness.

### Lumber and Engineered Wood Products

Although some shortages have occurred in various years, a sustained shortfall of red alder fiber has not yet taken hold in the region. Today, as Asian papermakers move their hardwood supply toward eucalyptus and acacia plantations from the Southern Hemisphere, thus curtailing the export market for alder chips, prices for hardwood chips are near all-time lows, and many grovers are adopting a multiple-product plantation strategy focused primarily on solid wood commodities. One traditional outlet is the plywood market, which uses the native black cottonwood for core veneer stock. A potentially more lucrative market is the use of hybrid poplar as a substitute for species such as red alder, American basswood (*Tilia americana*), and yellow-poplar (*Liriodendron tulipifera*) in

## EXHIBIT 6-4

the manufacture of decorative molding, window casings, boxes, frame stock, blinds, and several furniture components (Mater Engineering 1998). The acceptance of hybrid poplar in conventional solid wood markets has not been wholly proven, but mill trials have demonstrated that hybrid poplar machines well, accepts a wide range of finishes, glues well, and does not warp when adequately dried (Carlson and Berger 1998). Furthermore, the wood's bright, light color; light weight; and smooth-grain appearance are all quite desirable. For the time being, hybrid poplar is forging its own niche market in specialty wood products such as edge-glued panels used in the construction of cabinetry, paneling, and doors. Broadacres Nursery, an Oregon poplar grower, has constructed a 1,500-square-foot building in which 95 percent of the building materials were derived from poplar and featured engineered joists as framing, structural grade plywood, and finish molding. Poplar's relatively low strength and surface hardness will, however, preclude most structural applications, although the wood of selected varieties may have a commercial potential for some construction uses (e.g., web members of trusses, studs of walls) (Kretschmann et al. 1999).

Sawlogs and peeler logs will be grown at stocking rates of 200 to 300 trees per acre for 12 to 15 years. (Under current Oregon guidelines, poplar rotations are limited to 12 years if they are to be regulated and taxed as an agricultural crop. Fifteen-year rotations are consistent with an agricultural designation in Washington, after which hybrid poplar is considered a timber crop subject to regulations of the Forest Practices Act.) Log yields of 6,800 to 7,500 cubic feet per acre (five-inch small-end diameter) and up to 12 dry tons of residual chips have been estimated for 12-year-old stands. Based on mill trials of small-diameter poplar logs (Carlson and Berger 1998), the total yield of sawn lumber could be as high as 20,000 to 30,000 board feet per acre. Presently, some landowners are thinning five-year-old pulpwood plantations to enable the production of sawlogs on an extended rotation (five-



In-field delimbing, debarking, and chipping of trees from an eight-year-old hybrid poplar stand along the lower Columbia River floodplain. The yield of clean wood chips is 40 bone-dry tons per acre.

Brian Stanton

year-old stands will respond to release while yielding a sufficient quantity of wood chips to cover the cost of stand improvement). Pruning to 21–24 feet in four annual lifts beginning in the second year is likely to become routine given the premium placed on high-quality, clear wood.

Hybrid poplar also has been tested in the manufacture of oriented strand board (OSB) and laminated veneer lumber (LVL). Closely related to aspen, which has been the quality standard for OSB manufacture, hybrid poplar has proved a good substitute requiring some modifications in resin and press time specifications. Hybrid poplar is often blended with other species to compensate for its low wood density, which improves the strength characteristics of OSB and LVL products.

### Environmental Applications

The economic impact of hybrid poplar culture in the Northwest extends well beyond commodity production to its role in pollution abatement projects. Poplar stands have proved highly effective in removing nutrients from effluent when irrigated with municipal and industrial wastewater and in nutrient removal from farm runoff (O'Neill and Gordon 1994; Schultz et al. 1995; US Environmental Protection Agency 1999). Hybrids are well-suited to each of these applications by virtue of an extensive root system that

ensures good soil percolation and a free-growth pattern of shoot development that helps in maintaining a large leaf area into the fall, thus prolonging the irrigation season. Moreover, the superior rates of biomass accumulation and elevated leaf area indices maximize rates of transpiration and nutrient uptake.

A large number of environmental plantings are now evident throughout the region. These include the cities of Woodburn and McMinnville, Oregon, and Vernon, British Columbia, each of which has used poplar in treating their municipal effluent or in containing landfill leachate. Riparian buffer plantings also are being used in the Tillamook basin to protect the water quality of anadromous fish-bearing streams from the runoff from adjacent dairy farms. In the industrial sector, a fish processing plant in Shelton, Washington, a vegetable cannery in Brooks, Oregon, and a potato processing plant in Caldwell, Idaho, also have incorporated poplar plantings into their treatment of waste process water, while a pulp mill in Halsey, Oregon, is testing poplar plantings in the treatment of secondary pulp sludge. A related application uses hybrid poplar's ability to metabolize certain toxic chemicals (Burken and Schnoor 1997; Gordon et al. 1997) in removing trichloroethylene from an industrial landfill near Bremerton, Washington, with consid-

**LANFEAR Thom**

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**From:** MORGAN Bill F  
**Sent:** Monday, April 12, 2004 3:25 PM  
**To:** LANFEAR Thom  
**Cc:** FIELDS Phil  
**Subject:** PA 03-5901, 520 Ridgewood Drive

Thom: Please find attached all of the previous correspondence which led to the Goal 12 response on page 19 of the applicant's packet. It seems we are all in agreement as to the requirements for the road system for this plan amendment. Let me know if you have any questions.

Bill Morgan, PE  
 Sr Eng Associate, Lane County Public Works Dept  
 3040 N Delta Hwy Eugene, OR 97408-1696  
 ph (541) 682-6932 fax (541) 682-8554  
 bill.morgan@co.lane.or.us

Dear Mr. Morgan:

Thank you for your e-mail and preliminary thoughts on the potential required road improvements. In concept, an 18' traveled road width on our property, and widening the privately maintained 10' road portion to 18' seem fair and reasonable.

We will shortly submit our formal minor plan amendment and rezone application to Land Management.

Sincerely,  
 Roy Carver, III  
 on behalf of Carver Trust No. 1  
 PO Box 51505  
 Eugene, Or 97405  
 Phone: 541 687-5922  
 E-mail: rcarveriii@aol.com

Dear Mr. Carver:

The Transportation Planning Section has had the opportunity to further review the information you provided us on your potential development adjacent to Ridgewood Drive. The main questions you have posed are summarized as follows:

1. What would be the anticipated road improvement requirements?
2. What would be the anticipated requirements to meet Goal 12 due to the minor plan amendment and zone change?

As discussed on the phone, I was able to further research and can provide you with some recommendations; however, I can not speak on behalf of other departments, sections, boards or commissions. Until we have a formal referral action request on this project, additional information may come up that affects the final recommendations. This is especially true in that your proposal will ultimately involve a minor plan amendment.

With regard to the anticipated road improvement requirements, the current road design requirement for a Private Road in an RR zone is 22 feet for the travel width. We are currently proposing in our road design standards to lessen the standard to 18 feet, for a road serving four or more parcels (your case). Therefore, we are already recommending a reduction of 4 feet to current code requirements.

It appears that the section of Ridgewood Drive from Pinewood Terrace to your property line is currently 10 feet in width and is paved. Very likely this portion of private road was constructed outside of our review and acceptance. And, our recommendation would be that this section of traveled roadway be widened by 8 feet to meet the above mentioned proposed standards. The new portion of roadway to be constructed within your proposed development could likewise have a minimum total travel width of 18 feet.

You have stated that the lower section (Local County Road) of Ridgewood Drive from Blanton to Pinewood Terrace has a traveled width ranging from 22 feet to 16 feet. You would not be expected to widen any portion of this roadway that does not meet the 18 foot standard. Our information indicates this subdivision was platted in 1960 and very likely received no close scrutiny or formal

acceptance of the present travel width. Even though this roadway has been around for many years, we can not recommend that the requirements for your portion of the road way serving your development only be built or widened to 16 feet, as you have requested. Although I can certainly appreciate your desire to match the lowest existing width that is currently being maintained by Lane County, this does not serve the public's interest in the long run.

With regard to the plan amendment/Goal 12 requirements, we would suggest you or your planning professional refresh yourselves by reading through Section 660-012-0060 of Division 12, which deals with Plan and Land Use Regulation Amendments. Take time to answer the questions regarding your plan and land use amendment as they relate to the transportation facility. Ultimately, it will be up to you and your professional to address this requirement, but at this time, I do not see anything out of the ordinary significantly impacting the transportation facilities.

I hope this has answered the questions you have asked, or provided additional information for your benefit.

Bill Morgan  
Sr Eng Associate, Lane County Public Works Dept  
3040 N Delta Hwy Eugene, OR 97408-1696  
ph (541) 682-6932 fax (541) 682-8554  
bill.morgan@co.lane.or.us

**Eugene Water & Electric Board**

500 East 4th Avenue / Post Office Box 10148  
Eugene, Oregon 97440-2148  
541-484-2411 Fax 541-484-3762

April 6, 2004

Thom Lanfear  
Lane County Land Management Division  
Public Service Building  
125 East 8<sup>th</sup> Ave.  
Eugene, OR 97401

REC'D APR 07 2004

Re: PA 03-5901 Julia Carver/Harry Taylor

Dear Thom,

EWEB will provide water service to the subject tract under the provisions of our annexation of the Hillcrest Water District. The subject property is at an elevation that will only allow minimum pressures to be provided. The property owner is advised that "boosting" the pressure will be the responsibility of the property owners of any residences that are subsequently developed. All other terms of service will be carried out in accordance to EWEB Policies and Procedures.

EWEB does not foresee any issues relative to the demands the rezoning would place on the water system.

I would also like to point out what I believe to be a discrepancy in the boundary of the parcel as shown on the map that was provided. The 30-foot "roadway" is shown as a part of tax lot 3500, I believe it is a part of tax lot 3508 and owned by the City of Eugene. A deed dated April 15, 1983 from Hugh and Helen Wood to the City of Eugene includes a parcel described in Exhibit B that seems to match the roadway. The deed also conveyed Tax lot 3508 as described in Exhibit A. The deed is document 8327362 on Reel 1256R.

Thank you for the opportunity to comment.

Sincerely,

Jay Bozievich, P.E.  
Sr. Engineer  
Water Division

The space on this page is provided for your written comments.

File No.: PA 03-5901  
 Applicant: Julia Carver / Harry Taylor  
 TRS/TL: 18-04-13 #3500

You may write your comments on this page and return this document to the attention of Thom Lanfear, Lane County Land Management Division, Public Service Building, 125 East 8th Ave., Eugene, OR. 97401. ... Fax 687-3947 ...

Date: 4-6-04  
 From: Cole Living Trust  
Wellard - Joyce Cole

Comments:

Our concern for the requested zone change & development requested at 520 Redwood Drive by Julia Carver is the additional traffic. The road is a narrow dead end one lane road already busy from the established residents in the area plus the business deliveries and employees at 42 Redwood Drive. We hate to see the flora & fauna environment disturbed in the area. The reason for living here.

The space on this page is provided for your written comments.

REC'D APR 07 2004

File No.: PA 03-5901  
Applicant: Julia Carver / Harry Taylor  
TRS/TL: 18-04-13 #3500

You may write your comments on this page and return this document to the attention of Thom Lanfear, Lane County Land Management Division, Public Service Building, 125 East 8th Ave., Eugene, OR. 97401. ... Fax 687-3947 ...

Date: April 5, 2004

From: Ken & Shirley Wlat  
4344 Blanton Rd  
Eugene Or 97405

Comments:

Construction on the 4.2 acres in question  
will cause much more traffic on the  
one lane road leading up to site. The road is  
already busy with the business on Ridgewood  
and the homes already up there.

There will be an impact on  
the wildlife as they are being pushed  
out of their space now and that area  
up there is one of the best sage areas.

Some places should be left  
alone, keep the country feel. One  
thing we don't need up here is more houses  
and traffic.

W.7.B.1.

## **AGENDA COVER M E M O**

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AGENDA DATE:	December 15, 2004
TO:	LANE COUNTY BOARD OF COMMISSIONERS
DEPARTMENT:	LANE COUNTY ADMINISTRATION
PRESENTED BY:	Kay Blackburn, Internal Auditor
AGENDA ITEM TITLE:	IN THE MATTER OF ADOPTING THE INTERNAL AUDITOR WORKPLAN

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### **I. MOTION**

MOVE TO ADOPT THE INTERNAL AUDITOR WORK PLAN

### **II. ISSUE**

Lane County has engaged an Internal Auditor to perform financial, operational and performance audits and assist with external audits and process improvements. LM 3.072 indicates that the Board will approve the work plan for the Internal Auditor.

### **III. DISCUSSION**

#### **A. Analysis**

The work plan was developed taking into account 1) issues raised during the most recent external audit, 2) reviews of internal controls and risks associated with various programs; and 3) input from the Commissioners on prioritization of potential work plan items. This plan has been presented to and approved by Finance and Audit.

#### **B. Alternatives/Options**

The Board may accept the work plan as proposed, or may reject the work plan and request changes.

#### **C. Implementation/Follow Up**

Work will begin immediately on projects in the order listed. Monthly status reports will be provided to Finance and Audit, along with quarterly status reports to the Board of County Commissioners.

#### **D. Recommendations**

Recommend adoption of the Work Plan as presented.

#### **IV. ATTACHMENTS**

Attachment A – Board Order 04-12-15-XX

Attachment B – Internal Auditor Work Plan 2005